Ephemerides. K. ~~756. b 22~~
P.P. 2467

ʼΟλύμπια Δώματα·

OR, AN

ALMANACK

For the YEAR of

Our LORD GOD, 1786;

Being the Second after

BISSEXTILE, or LEAP-YEAR,

And from the World's Creation, 5790.

Wherein is Contained the Lunations, Conjunctions, Aſpects, and Effects of the Planets; and Increaſe, Decreaſe, and Length of the Days and Nights; with the Riſing, Southing, and Setting of the Planets and fixed Stars throughout the Year; whereby may be known the exact Hour of the Night at all Times, when either the Moon or Stars are ſeen.

Calculated according to Art, and referred to the Horizon of the ancient and renowned Borough Town of *Stamford* (formerly a famous Univerſity), whoſe Latitude is 52 Deg. 20 Min. fitting all the middle Counties of *ENGLAND*, and, without ſen[illegible] the whole Kingdom.

Non eſt è Terris mollis ad A[illegible]

By TYCHO WING, *Philomath.*

LONDON:
Printed for the COMPANY of STATIONERS,
And ſold by R. HORSFIELD, at their Hall, in Ludgate-Street.

[Price, ſtitched, NINE PENCE.]

Common NOTES and Moveable FEASTS.

Dominical Letter	A	Septuageſima Sund.	Feb. 12
Golden Number	1	Shrove Sunday	Feb. 26
Epact	0	Eaſter Day	Apr. 16
Cycle of the Sun	3	Whit-Sunday	June 4
Roman Indiction	4	Trinity Sunday	June 11
Number of Direction	26	Advent Sunday	Dec. 3

A CATALOGUE of the Moſt Reverend, Right Reverend, and Reverend, the Archbiſhops, Biſhops, and Deans, exerciſing Eccleſiaſtical Juriſdiction in England, 1786.

Archbiſhops.	*Deans Names.*	*Sees Names.*
Dr. John Moore	Dr. George Horne	Canterbury
Dr. Wm. Markham	Dr. John Fountayne	York
Biſhops.		
Dr. Robert Lowth	Biſhop Thurlow	London
Hon. Dr. John Egerton	Hon. Dr. Wm. Digby	Durham
Hon. Dr. Br. North	Dr. Newton Ogle	Wincheſter
Lord James Beauclerk	Dr. Nat. Wetherell	Hereford
Hon. Dr. James Yorke	Dr. William Cooke	Ely
Sir Wm. Aſhburnham	Dr. Charles Harward	Chicheſter
Hon. Dr. S. Barrington	Dr. Rowney Noel	Saliſbury
Dr. Lewis Bagot	Dr. Philip Lloyd	Norwich
Dr. Chriſtoph. Wilſon	Dr. J. Hallam	Briſtol
Dr. Charles Moſs	Lord Fran. Seymour	Bath and Wells
Dr. Jonathan Shipley	Mr. W. Shipley	St. Aſaph
Dr. Edmund Law	Dr. Thomas Wilſon	Carliſle
Dr. Richard Watſon	Dr. Adams, Archdeac.	Landaff
Dr. John Hinchcliffe	Dr. Tarrant	Peterborough
Dr. Richard Hurd	Dr. Foley	Worceſter
Dr. Samuel Hallifax	Dr. Joſiah Tucker	Glouceſter
Dr. John Thomas	Dr. T. Dampier	Rocheſter
Hon. Dr. J^{s} Cornwallis	Dr Proby	Litchf. and Cov.
Dr. John Warren	Dr. Thomas Lloyd	Bangor
Dr. Beilby Porteus	Dr. William Smith	Cheſter
Dr. John Butler	Dr. Cyril Jackſon	Oxford
Dr. John Roſs	Dr. William Buller	Exeter
Dr. Thomas Thurlow	Dr. Richard Kaye	Lincoln
Dr. Edward Smalwell	Mr. Wollaſton, Prec.	St. David's
	Dr. John Thomas	Weſtminſter
Mr. Claudius Crigan		Sodor and Man
	Hon. John Harley	Windſor

A TABLE of TERMS and their Returns.

Returns or Eſſoign Days.		Exc.	Ret.	App.	W. D.
HILARY Term begins January 23—ends February 13.					
In Eight Days of St. *Hilary*, - - -	Jan. 20	21	22	23	Mond.
From the Day of St. *Hilary* in 15 Days,	27	28	29	30	Mond.
On the Morrow of the Purif. bleſſ. *Mary*,	Feb. 3	4	5	6	Mond.
In eight Days of the Purif. of bleſſed *Mary*,	9	10	11	13	Mond.
EASTER Term begins May 3—ends May 29.					
From the Day of Eaſter in 15 Days,	May 1	1	2	3	Wedn.
From the Day of Eaſter in 3 Weeks, - -	8	8	9	10	Wedn.
From the Day of Eaſter in 1 Month, - -	15	15	16	17	Wedn.
From the Day of Eaſter in 5 Weeks, - -	22	22	23	24	Wedn.
On the Morrow of the Aſcenſion, - - -	26	27	28	29	Mond.
TRINITY Term begins June 16—ends July 5.					
On the Morrow of the Holy Trinity,	June 12	13	14	16	Friday.
In Eight Days of the Holy Trinity, - -	19	19	20	21	Wedn.
In 15 Days of the Holy Trinity, - - -	26	26	27	28	Wedn.
In 3 Weeks of the Holy Trinity, - -	July 3	3	4	5	Wedn.
MICHAELMAS Term begins November 6—ends November 28.					
On the Morrow of All Souls, - -	Nov. 3	4	5	6	Mond.
On the Morrow of St. *Martin*, - - -	13	13	14	15	Wedn.
In Eight Days of St. *Martin*, - - - - -	18	19	20	21	Tueſ.
In 15 Days of St. *Martin*, - - - - -	25	26	27	28	Tueſ.

N. B. No Sittings in Weſtminſter-Hall upon *Aſcenſion-Day*, *Midſummer-Day*, and the 2d of *February*.

The *Exchequer* opens Eight Days before any Term begins, except *Trinity*, before which it opens but Four Days.

Note, The Firſt and Laſt Days of every Term, are the Days of Appearance.

The Names of the Learned JUDGES in the Law.

I. Rt. Hon. Lord Thurlow, Lord High Chancellor.

Right Hon. Sir Lloyd Kenyon, Bart. Maſter of the Rolls.

II. In the K. Bench.	Rt. Hon. W. Earl of Mansfield, L.C.J. Sir Wm. Henry Aſhurſt, Knt.	Edw. Willes, Eſq. Fran. Buller, Eſq.
III. In the Co. Pleas.	Rt. Hon. Al. Ld. Loughborough, L.C.J. Sir Geo. Nares, Knt.	Sir H. Gould, Knt. John Heath, Eſq.
IV. In the Exchequer.	Sir John Skynner, Knt. L. C. B. Sir Beaumont Hotham, Knt.	Sir James Eyre, Knt. Sir Rich. Perryn, Kt.

Rd. Pepper Arden, Eſq. Att. Gen. Arch. M'Donald, Eſq. Sol Gen.

The REGAL Table.

The Year, Month, and Day, when each King and Queen began to reign, accounting the Year to begin *Jan.* 1.		Length of each Reign.			Number of Years expired ſince their Reigns ended.	
Kings Names	began to reign	Y.	M.	D.	beg	Kings Names
William I.	1066 Oct. 14	20	10	26	699	William 1
William II.	1087 Sept. 9	12	10	24	686	William 2
Henry I.	1100 Aug. 2	35	3	29	651	Henry 1
Stephen	1135 Dec. 1	18	10	24	632	Stephen
Henry II.	1154 Oct. 25	34	8	11	597	Henry 2
Richard I.	1189 July 6	9	9	0	587	Richard 1
John	1199 April 6	17	6	13	570	John
Henry III.	1216 Oct. 19	56	0	28	514	Henry 3
Edward I.	1272 Nov. 16	34	7	21	479	Edward 1
Edward II.	1307 July 7	19	6	18	459	Edward 2
Edward III.	1327 Jan. 25	50	4	27	409	Edward 3
Richard II.	1377 June 21	22	3	8	387	Richard 2
Henry IV.	1399 Sept. 29	13	5	20	373	Henry 4
Henry V.	1413 Mar. 20	9	5	11	364	Henry 5
Henry VI.	1422 Aug. 31	38	6	4	325	Henry 6
Edward IV.	1461 Mar. 4	22	1	5	303	Edward 4
Edward V.	1483 April 9	0	2	13	303	Edward 5
Richard III.	1483 June 22	2	2	0	301	Richard 3
Henry VII.	1485 Aug. 22	23	8	0	277	Henry 7
Henry VIII.	1509 April 22	37	9	6	239	Henry 8
Edward VI.	1547 Jan. 28	6	5	8	233	Edward 6
Q. Mary I.	1553 July 6	5	4	11	228	Q. Mary
Q. Elizabeth	1558 Nov. 17	44	4	7	183	Q. Elizabeth
James I.	1603 Mar. 24	22	0	3	161	James 1
Charles I.	1625 Mar. 27	23	10	3	137	Charles 1
Charles II.	1649 Jan. 30	36	0	7	101	Charles 2
James II.	1685 Feb. 6	4	0	7	97	James 2
Will. 3. & M.	1689 Feb. 13	13	0	23	84	William 3
Q. Anne	1702 Mar. 8	12	4	24	72	Q. Anne
George I.	1714 Aug. 1	12	10	10	59	K. George 1
George II.	1727 June 11	33	4	14	26	K. George 2
George III.	1760 Oct. 25	Crowned Sept. 22, 1761.				

The Uſe of the following TABLE *of the Moon's Southing, to find the Time of High-Water, and the Hour of the Night.*

I. To find the Time of High-Water in moſt Parts of ENGLAND.

Take the Time of the Moon's Southing for the Day propoſed, and to that add the Hours and Minutes which ſtand againſt the Place required in the following Table of Sea-Coaſts, and the Sum will be the Time of High-Water at the Place required on that Day.

A Table of the Sea Coaſts.	H.	M.
Portſmouth, Queenborough, Southampton,	0	00
Rocheſter, Winchelſea, Fluſhing,	0	45
Downs, Graveſend, Ramkins, Guernſey,	1	30
Denbigh, Bell-Iſle, Holy-Iſle, Downs-Road,	2	15
London, Tinmouth, Whitby, Hartlepool,	3	00
Scarborough, Berwick, Fluſhing, Staples,	3	45
Flamborough, Humber, Bridlington-Bay,	4	30
Plymouth, Ramſay, Newcaſtle, Severn,	5	15
Lynn, Foſdyke, Hull, Weymouth, Dartmouth, Croſs-Keys,	6	00
Boſton, Start-Point, Foulneſs, Briſtol-Key,	6	45
Bridgewater, Milford Haven, Lizard, Wintertown,	7	30
Yarmouth, Iſle of Wight, the Needles,	8	15
Iſle of Man, Orkney, Pool, South-Foreland,	9	10
Dover, Harwich, Orfordneſs, Bullein,	10	10
Rye, Solebay, Margate-Road,	11	15

II. To find the Hour of the Night by the Shadow of the Moon on a Sun-Dial.

1. When the Shadow falls preciſely on the Hour 12, then the Time of the Moon's Southing, found in the preceding Table, is the exact Time of Night. But in other Caſes,

2. If the Shadow wants of 12, ſee how much it wants of it; which Time, ſubtracted from that of the Moon's Southing, leaves the Time of Night. *Note*, You muſt add 12 Hours to the Moon's Southing, if Need be.

3. If the Shadow has paſt 12, add the Time that it has paſt it to the Time of the Moon's Southing; the Sum will be the Time of Night required; abating 12 Hours from that Sum, if Need be.

A TABLE of the MOON'S SOUTHING, of excellent Uſe to

M D	January h	m	February h	m	March h	m	April h	m	May h	m	June h	m
1	0 a	54	2 a	0	0 a	41	2 a	15	3 a	12	4 a	37
2	1	47	2	50	1	33	3	15	4	11	5	22
3	2	38	3	41	2	27	4	19	5	6	6	4
4	3	26	4	33	3	23	5	19	5	57	6	45
5	4	14	5	27	4	21	6	15	6	44	7	26
6	5	2	6	24	5	21	7	7	7	28	8	7
7	5	51	7	23	6	21	7	56	8	9	8	49
8	6	43	8	22	7	18	8	41	8	49	9	34
9	7	38	9	19	8	12	9	23	9	29	10	22
10	8	36	10	12	9	2	10	4	10	11	11	12
11	9	36	11	2	9	49	10	45	10	55	morn	
12	10	35	11	48	10	34	11	26	11	41	0	4
13	11	31	morn		11	16	morn		morn		0	57
14	morn		0	32	11	57	0	8	0	29	1	49
15	0	24	1	13	morn		0	53	1	20	2	40
16	1	13	1	54	0	38	1	40	2	12	3	29
17	1	58	2	35	1	19	2	29	3	4	4	17
18	2	41	3	16	2	2	3	20	3	56	5	3
19	3	21	4	0	2	47	4	12	4	46	5	50
20	4	1	4	46	3	35	5	5	5	35	6	39
21	4	42	5	35	4	26	5	57	6	22	7	30
22	5	23	6	27	5	18	6	48	7	9	8	25
23	6	8	7	20	6	11	7	38	7	59	9	25
24	6	55	8	16	7	5	8	27	8	51	10	27
25	7	46	9	11	7	58	9	17	9	46	11	30
26	8	40	10	5	8	50	10	9	10	45	0 a	32
27	9	35	10	58	9	41	11	4	11	47	1	29
28	10	31	11	50	10	33	0 a	3	0 a	51	2	21
29	11	27			11	26	1	5	1	54	3	8
30	0 a	20			0 a	20	2	8	2	53	3	53
31	1	11			1	16			3	47		

Spring Quarter begins	-	March	20 d.	10 h.	29 m.	morning.
Summer Quarter begins	-	June	21	8	29	morning.
Autumn Quarter begins	-	Sept.	22	10	3	evening.
Wihter Quarter begins	-	Dec.	21	2	33	afternoon.

The Moon's Southing.

find the Time of High-Water, and the Hour of the Night.

M	July		Auguſt		September		October		November		December	
D	h	m	h	m	h	m	h	m	h	m	h	m
1	4 a	35	5 a	16	6 a	28	7 a	4	8 a	15	8 a	27
2	5	16	6	2	7	20	7	54	9	3	9	22
3	5	57	6	50	8	12	8	44	9	54	10	21
4	6	40	7	40	9	5	9	33	10	49	11	24
5	7	24	8	32	9	57	10	23	11	48	morn	
6	8	10	9	25	10	47	11	14	morn		0	29
7	8	59	10	18	11	37	morn		0	51	1	33
8	9	51	11	10	morn		0	8	1	55	2	33
9	10	44	morn		0	27	1	5	3	0	3	28
10	11	37	0	1	1	19	2	5	4	1	4	19
11	morn		0	51	2	13	3	8	4	57	5	5
12	0	29	1	40	3	10	4	11	5	48	5	48
13	1	19	2	29	4	9	5	12	6	35	6	30
14	2	8	3	20	5	10	6	9	7	18	7	11
15	2	56	4	13	6	11	7	2	8	0	7	53
16	3	44	5	9	7	9	7	51	8	42	8	37
17	4	32	6	7	8	4	8	36	9	23	9	23
18	5	22	7	7	8	56	9	19	10	6	10	10
19	6	15	8	7	9	44	10	1	10	50	10	59
20	7	11	9	5	10	29	10	43	11	37	11	49
21	8	10	10	1	11	12	11	25	0 a	25	0 a	39
22	9	11	10	51	11	54	0 a	9	1	15	1	29
23	10	12	11	39	0 a	37	0	55	2	5	2	17
24	11	12	0 a	24	1	20	1	42	2	55	3	3
25	0 a	6	1	7	2	5	2	31	3	44	3	48
26	0	55	1	49	2	51	3	21	4	31	4	33
27	1	42	2	32	3	39	4	12	5	17	5	18
28	2	26	3	15	4	29	5	2	6	2	6	6
29	3	8	4	0	5	20	5	51	6	48	6	57
30	3	50	4	48	6	12	6	39	7	36	7	52
31	4	32	5	37			7	27			8	51

VENUS is a Morning Star till March 21, and then an Evening Star for the reſt of the Year.

JUPITER is an Evening Star till April 17, then a Morning Star till Nov. 8, and then an Evening Star to the End.

January xxxi Days.

Lunations.

First Quarter 7th day, at 1 afternoon.
Full Moon 14th day, at 1 afternoon.
Laſt Quarter 22d day, at noon.
New Moon 30th day, at 3 morning.

M D	Jupiter ſets	Venus riſes
1	11 a 47	7m 39
7	11 24	7 29
13	11 3	7 19
19	10 43	7 10
25	10 23	7 2

M D	W D	Holy Days, ☉ riſes & ſets	☽ riſes & ſets	☽'s Longit.	☽'s Declin.	Aſpects and Weather
1	A	1 S. aft. Chriſt.	5 a 5	23♑23	22 s 18	Circumciſion
2	M		6 25	6♒59	18 11	
3	Tu	Sun riſes 8 3	7 47	20 46	13 3	Wind, with either
4	W	Sun ſets 3 58	9 7	4♓43	7 12	
5	Th	*Old Chriſt.-day*	10 29	18 46	0 58	rain or ſnow.
6	F	Epiphany	11 57	2♈54	5 n 20	
7	S		morn	17 5	11 24	
8	A	1 S. aft. Epiph.	1 21	1♉16	16 52	*Lucian.* ☌ ☉ ☿
9	M	*Plow Monday*	2 47	15 26	21 24	
10	Tu	Sun riſes 7 57	4 9	29 32	24 40	Rough winds.
11	W	Sun ſets 4 4	5 26	13♊31	26 26	
12	Th	*Old New Y. Day*	6 32	27 20	26 31	
13	F	Cam. T. begins	7 20	10♋56	24 59	*Hilary.* □ ♃ ♀
14	S	Oxf. T. begins	☽ riſes	24 18	22 3	☌ ♀ ☿
15	A	2 S. aft. Epiph.	5 a 31	7♌23	18 2	
16	M		6 44	20 12	13 16	Variable,
17	Tu	Sun riſes 7 48	8 0	2♍44	8 3	
18	W	Q. Ch. b. d. kept	9 10	15 2	2 37	*Priſca*
19	Th		10 19	27 7	2 s 48	△ ☉ ♂
20	F	***Fabian***	11 28	9♎5	8 3	but all winterly,
21	S	***Agnes***	morn	20 57	12 59	
22	A	3 S. aft. Epiph.	0 38	2♏50	17 26	***Vincent***
23	M	Hil. Term beg.	1 50	14 48	21 14	
24	Tu		3 0	26 55	24 11	and unpleaſant.
25	W	Conv. St. Paul	4 10	9♐17	26 5	
26	Th	Sun ſets 4 24	5 12	21 55	26 41	
27	F	Pr. Aug. Fr. bo.	6 3	4♑55	25 51	☌ ☉ ♄
28	S		6 43	18 16	23 33	
29	A	4 S. aft. Epiph.	7 13	1♒58	19 50	⚹ ☉ ♃
30	M	K. Cha. I. mart.	☽ ſets	15 59	14 55	
31	Tu		6 a 41	0♓15	9 7	

M D	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	4 ♒ 52	19 s 40	6 ♈ 35	1 n 25	28 ♉ 16	22 n 10	22 ♐ 10	22 s 43
7	5 33	19 39	7 16	1 43	28 29	22 14	29 41	23 13
13	6 15	19 20	8 4	2 3	29 6	22 23	7 ♑ 12	23 16
19	6 57	19 10	8 47	2 25	0 ♊ 7	22 35	14 44	22 54
25	7 40	18 59	9 53	2 49	1 29	22 51	22 15	22 7

M D	☉'s Longit.	☉'s Declin.	Obſervations
A	11 ♑ 21	22 s 59	Clock before the Sun 4 min. 15 ſec.
2	12 23	22 54	
3	13 24	22 48	Saturn ſets at 5 h. 49 m. afternoon.
4	14 25	22 41	Day is 7 h. 56 m. long.
5	15 26	22 34	Mars ſets at 4 h. 47 m. morning.
6	16 27	22 27	Twilight ends at 6 h. 4 m.
7	17 29	22 20	Seven Stars ſouth at 8 h. 19 m. night.
A	18 30	22 11	
9	19 31	22 3	Day increaſed 20 minutes.
10	20 32	21 54	
11	21 33	21 44	Day breaks at 5 h. 54 min.
12	22 34	21 35	Saturn ſets at 5 h. 16 m. afternoon.
13	23 35	21 24	☽ eclipſed, inviſible.
14	24 36	21 14	
A	25 37	21 3	Mars ſets at 4 h. 9 m. morning.
16	26 39	20 51	Day increaſed 26 minutes.
17	27 40	20 39	
18	28 41	20 27	Clock before the Sun 11 m. 2 ſec.
19	29 42	20 14	☉ enters ♒ 7 h. 12 m. night.
20	0 ♒ 43	20 1	
21	1 44	19 48	Length of Day is 8 h. 32 min.
A	2 45	19 34	Seven Stars ſouth 7 h. 13 m. evening.
23	3 46	19 20	
24	4 47	19 6	Day breaks at 5 h. 41 m.
25	5 48	18 51	Twilight ends at 6 h. 21 m.
26	6 49	18 36	☿ greateſt elong. from ☉.
27	7 50	18 20	
28	8 51	18 4	Days are increaſed 1 h. 14 m.
A	9 52	17 48	
30	10 52	17 32	☉ eclipſed, inviſible.
31	11 53	17 15	

February xxviii Days.

Lunations.

Firſt Quarter 5th day, at 8 night.
Full Moon 13th day, at 5 morning.
Laſt Quarter 21ſt day, at 8 morning.
New Moon 28th day, at 2 afternoon.

M D	Jupiter ſets	Venus riſes
1	10 a 10	7 m 1
7	9 48	6 54
13	9 36	6 47
19	9 10	6 41
25	8 54	6 34

M D	W D	Holy Days, ☉ riſes & ſets	☽ riſes & ſets	☽'s Longit.	☽'s Declin.	Aſpects and Weather
	W		8 a 7	14 ♓ 42	2 s 47	
2	Th	Purification	9 34	29 13	3 n 43	Candlemas day
3	F	*Blaſe*	11 0	13 ♈ 42	10 0	△ ♂ ♀
4	S		morn	28 6	15 43	Dark,
5	A	5 S. aft. Epiph.	0 26	12 ♉ 20	20 30	*Agatha*
6	M		1 51	26 23	24 4	
7	Tu		3 9	10 ♊ 12	26 9	☌ ♄ ♀
8	W	Sun riſes 7 14	4 18	23 48	26 38	
9	Th	Sun ſets 4 48	5 10	7 ♋ 10	25 33	ſtormy rain,
10	F		5 51	20 19	23 4	☽ in Ap. ⚹ ♃ ♀
11	S		6 8	3 ♌ 16	19 25	
12	A	Septuageſ. S.	6 39	16 0	14 55	then
13	M	Hil. Term ends	☽ riſes	25 32	9 51	*Old Cand. day*
14	Tu	*Valentine*	6 a 49	10 ♍ 54	4 29	more calm,
15	W		8 0	23 6	0 s 57	and moderate.
16	Th	Sun riſes 6 59	9 9	5 ♎ 8	6 18	
17	F	Sun ſets 5 3	10 19	17 5	11 21	
18	S		11 30	28 57	15 59	☌ ♄ ☿. △ ♂ ☿
19	A	Sexageſima S.	morn	10 ♏ 49	19 59	
20	M		0 42	22 45	23 13	
21	Tu	Sun riſes 6 50	1 51	4 ♐ 50	25 27	△ ♄ ♂. ⚹ ♃ ♀
22	W	Sun ſets 5 12	2 56	17 7	26 32	
23	Th		3 51	29 43	26 17	Sharp weather,
24	F	St. Matthias	4 36	12 ♑ 40	24 37	Pr. Ad. Fred. b
25	S		5 10	26 3	21 32	☽ in Perigeo.
26	A	Quinquageſ. S.	5 37	9 ♒ 52	17 9	
27	M		5 58	24 7	11 41	
28	Tu	Shrove-Tueſd.	☽ ſets	8 ♓ 44	5 27	

M D	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	8 ♒ 30	18 s 47	11 ♈ 6	3 n 18	3 ♊ 27	23 n 13	1 ♒ 1	20 s 41
7	9 13	18 36	12 12	3 45	5 25	23 33	8 32	19 3
13	9 55	18 25	13 22	4 14	7 34	23 52	16 3	17 7
19	10 37	18 14	14 35	4 43	9 56	24 12	23 33	14 51
25	11 18	18 3	15 51	5 13	12 27	24 31	1 ♓ 3	12 22

M D	☉'s Longit.	☉'s Declin.	Obſervations
1	12 ♒ 54	16 s 58	Clock before the Sun 14 m. 7 ſec.
2	13 55	16 40	Saturn riſes at 7 h. 17 m. morning.
3	14 56	16 23	Twilight begins 5 h. 27 min.
4	15 57	16 5	Mars ſets at 3 h. 13 m. morning.
A	16 57	15 46	
6	17 58	15 28	Sun is eaſt 5 h. 9 m.
7	18 59	15 9	
8	20 0	14 50	Day breaks at 5 h. 20 m.
9	21 0	14 31	Twilight ends at 6 h. 42 m.
10	22 1	14 11	Day is 9 h. 40 m. long.
11	23 1	13 52	Days are increaſed 1 h. 58 min.
A	24 2	13 32	Seven Stars ſouth at 5 h. 47 m. evening.
13	25 3	13 11	
14	26 3	12 51	Saturn riſes at 6 h. 33 m. morning.
15	27 4	12 30	Day breaks at 5 h. 9 min.
16	28 4	12 10	
17	29 5	11 49	
18	0 ♓ 5	11 27	☉ enters ♓ 10 h. 3 m. morn.
A	1 5	11 6	Mars ſets at 2 h. 43 m. morning.
20	2 5	10 45	Days are increaſed 2 h. 24 m.
21	3 6	10 23	Clock before the Sun 13 m. 56 ſec.
22	4 6	10 1	
23	5 7	9 39	Sun is eaſt 5 h. 28 m. morning.
24	6 7	9 17	
25	7 7	8 54	Day is 10 h. 36 m. long.
A	8 7	8 32	Seven Stars ſouth at 4 h. 54 min.
27	9 8	8 9	Days are increaſed 3 hours.
28	10 8	7 47	

March xxxi Days.

Lunations.

Firſt Quarter	7th day,	at	5 morning.
Full Moon	14th day,	at	10 evening.
Laſt Quarter	23d day,	at	2 morning.
New Moon	29th day,	at	12 night.

M D	Jupiter ſets	Venus riſes
1	8 a 44	6 m 33
7	8 29	6 26
13	8 15	6 18
19	8 2	6 8
25	7 49	5 55

M D	W D	Holy Days, ☉ riſes & ſets	☽ riſes & ſets	☽'s Longit.	☽'s Declin.	Aſpects and Weather
1	W	Aſh-Wedneſd.	7 a 8	23 ♓ 36	1 n 10	*David*
2	TH	*Chad*	8 37	8 ♈ 35	7 45	
3	F		10 7	23 32	13 53	Dull and moiſt.
4	S	Sun riſes 6 28	11 37	8 ♉ 18	19 8	
5	A	Quadrageſima	morn	22 46	23 9	1 S. in Lent
6	M		1 1	6 ♊ 55	25 39	□ ☉ ♂
7	TU	*Perpetua*	2 14	20 42	26 32	
8	W	Ember Week	3 12	4 ♋ 7	25 49	Rough winds.
9	TH		3 54	17 14	23 39	
10	F	Sun riſes 6 16	4 26	0 ♌ 5	20 19	☽ in Apogeo.
11	S	Sun ſets 5 46	4 48	12 41	16 6	✶ ♃ ♂ . □ ♂ ♀
12	A	2 Sun. in Lent	5 9	25 7	11 15	*Gregory*
13	M		5 28	7 ♍ 23	6 3	
14	TU	Sun riſes 6 8	☽ riſes	19 32	0 40	□ ♂ ☿
15	W	Sun ſets 5 54	7 a 2	1 ♎ 35	4 s 41	
16	TH		8 11	13 33	9 48	Sharp weather.
17	F	*St. Patrick*	9 22	25 27	14 33	☌ ♀ ☿
18	S	*Edm. K. W. S.*	10 32	7 ♏ 19	18 44	☌ ☉ ☿
19	A	3 Sund. in Lent	11 43	19 11	22 10	
20	M		morn	1 ♐ 7	24 42	
21	TU	*Benedict*	0 50	13 10	26 8	☌ ☉ ♀
22	W		1 48	25 24	26 20	
23	TH		2 36	7 ♑ 55	25 12	Clouds and
24	F		3 14	20 46	22 43	☽ in Perigeo.
25	S	Annunc. L. Day	3 42	4 ♒ 3	18 58	
26	A	4, or Midl. S.	4 5	17 47	14 5	✶ ♄ ☿
27	M		4 24	2 ♓ 2	8 17	
28	TU	Sun riſes 5 39	4 44	16 43	1 n 53	ſtorms.
29	W	Sun ſets 6 23	☽ ſets	1 ♈ 46	4 47	
30	TH		7 a 43	17 1	11 13	☌ ♃ ☿
31	F		9 15	2 ♉ 18	17 0	

M D	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	11 ♒ 44	17 s 56	16 ♈ 42	5 n 33	14 ♊ 12	24 n 42	6 ♓ 2	10 s 36
7	12 23	17 46	18 2	6 4	16 57	24 57	13 32	7 48
13	13 0	17 36	19 23	6 36	19 48	25 9	21 0	4 53
19	13 35	17 27	20 46	7 7	22 45	25 18	28 28	1 53
25	14 8	17 18	22 10	7 39	25 46	25 23	5 ♈ 56	1 n 9

M D	⊙'s Longit.	⊙'s Declin.	Obſervations
1	11 ♓ 8	7 s 24	Saturn riſes at 5 h. 40 m. morning.
2	12 8	7 1	Day is 10 h. 56 m. long.
3	13 8	6 38	Mars ſets at 2 h. 22 m. morning.
4	14 8	6 15	Day breaks at 4 h. 37 m.
A	15 8	5 52	
6	16 8	5 29	Days are increaſed 3 h. 28 m.
7	17 8	5 5	Day is 11 h. 16 m. long.
8	18 8	4 42	Clock before the Sun 10 m. 59 ſec.
9	19 8	4 18	
10	20 8	3 55	Saturn riſes at 5 h. 9 m. morning.
11	21 7	3 31	Twilight ends at 7 h. 38 m.
A	22 7	3 8	Mars ſets at 2 h. 11 m. morning.
13	23 7	2 44	
14	24 6	2 21	
15	25 6	1 57	Days are 11 h. 48 m. long.
16	26 6	1 33	Seven Stars ſouth at 3 h. 48 m. afternoon.
17	27 5	1 10	Twilight ends at 7 h. 51 m.
18	28 5	0 46	
A	29 4	0 22	
20	0 ♈ 4	0 n 2	⊙ enters ♈ 10 h. 29 m. morn.
21	1 3	0 25	Sun is eaſt at 6 h. 1 m. morning.
22	2 3	0 49	Day is 12 h. 16 m. long.
23	3 2	1 12	Saturn riſes at 4 h. 25 m. morning.
24	4 1	1 36	
25	5 1	2 0	Mars ſets at 1 h. 53 m. morning.
A	6 0	2 23	Day breaks at 3 h. 49 m.
27	6 59	2 47	
28	7 59	3 10	Days are increaſed 4 h. 56 min.
29	8 58	3 33	
30	9 57	3 57	Clock before the Sun 4 m. 28 ſec.
31	10 56	4 20	

April xxx Days.

Lunations.

First Quarter 5th day, at 4 afternoon.
Full Moon 13th day, at 3 afternoon.
Laſt Quarter 21ſt day, at 4 afternoon.
New Moon 28th day, at 8 morning.

M D	Jupiter ſets	Venus ſets
1	7 a 32	6 a 38
7	7 17	7 2
13	7 4	7 24
19	6 49	7 44
25	6 34	8 3

M D	W D	Holy Days, ☉ riſes and ſets	☽ riſes & ſets	☽'s Longit.	☽'s Declin.	Aſpects and Weather
1	S		10 a 44	17 ♉ 24	21 n 39	✱ ♄ ♀
2	A	5 Sund. in Lent	morn	2 ♊ 11	24 47	
3	M	*Richard*	0 2	16 33	26 13	✱ ♂ ☿
4	Tu	*St. Ambroſe*	1 11	0 ♋ 28	25 56	✱ ☉ ♄
5	W	*Old Lady Day*	1 59	13 56	24 6	Rainy,
6	Th		2 36	26 59	21 0	☽ in Apogeo.
7	F	Cam. T. ends	3 0	9 ♌ 42	16 59	
8	S	Oxf. T. ends	3 21	22 9	12 19	continues ſo
9	A	Palm-Sunday	3 37	4 ♍ 24	7 14	
10	M	Sun riſes 5 15	3 51	16 29	1 57	☌ ♃ ♀
11	Tu	Sun ſets 6 47	4 4	28 29	3 s 21	
12	W		4 17	10 ♎ 24	8 29	for ſome time,
13	Th	*Maundy Thurſd.*	☽ riſes	22 18	13 18	
14	F	Good-Friday	8 a 25	4 ♏ 11	17 36	
15	S		9 39	16 4	21 13	
16	A	Eaſter-Sunday	10 47	27 59	23 58	□ ♄ ☿
17	M	Eaſter-Mond.	11 47	9 ♐ 58	25 40	☌ ☉ ♃
18	Tu	Eaſter-Tueſd.	morn	22 4	26 10	then ſettled.
19	W	*Alphege*	0 38	4 ♑ 20	25 24	
20	Th		1 19	16 50	23 21	☽ in Perigeo.
21	F	Sun riſes 4 54	1 51	29 38	20 5	
22	S	Sun ſets 7 8	2 15	12 ♒ 49	15 44	✱ ♂ ♀
23	A	Low Sunday	2 34	26 26	10 27	St. George
24	M		2 52	10 ♓ 30	4 28	Wind.
25	Tu	St. Mark	3 9	25 2	1 n 56	Prs. Mary bo.
26	W	Ox.&Ca.T. be.	3 25	9 ♈ 59	8 22	□ ♄ ♀
27	Th		3 46	25 13	14 26	☌ ♀ ☿
28	F	Sun riſes 4 41	☽ ſets	10 ♉ 32	19 38	□ ♄ ☿
29	S	Sun ſets 7 20	9 a 45	25 46	23 30	
30	A	2 S. aft. Eaſter	10 59	10 ♊ 44	25 40	

M D	Saturn Longit.	Saturn Declin.	Jupiter Longit.	Jupiter Declin.	Mars Longit.	Mars Declin.	Venus Longit.	Venus Declin.
1	14 ♒ 44	17 s 8	23 ♈ 50	8 n 16	29 ♊ 24	25 n 24	14 ♈ 37	4 n 40
7	15 12	17 1	25 16	8 47	2 ♋ 34	25 19	22 3	7 38
13	15 38	16 54	26 42	9 20	5 48	25 10	29 28	10 29
19	16 0	16 48	28 9	9 52	9 4	24 56	6 ♉ 53	13 12
25	16 20	16 43	29 35	10 22	12 24	24 37	14 17	15 43

M D	☉'s Longit.	☉'s Declin.	Obſervations
1	11 ♈ 55	4 n 43	Seven Stars ſouth at 2 h. 50 m. afternoon.
A	12 54	5 6	
3	13 53	5 29	Saturn riſes at 3 h. 46 m. morning.
4	14 52	5 52	Clock faſt 2 m. 57 ſec.
5	15 51	6 15	Mars ſets at 1 h. 40 m. morning.
6	16 50	6 37	Twilight ends at 8 h. 35 m.
7	17 49	7 0	
8	18 48	7 22	Day is 13 h. 22 m. long.
A	19 47	7 45	Days are increaſed 5 h. 42 m.
10	20 45	8 7	
11	21 44	8 29	Day breaks at 3 h. 7 m.
12	22 43	8 51	
13	23 41	9 12	☿ greateſt elong. from ☉.
14	24 40	9 34	
15	25 39	9 55	Saturn riſes at 3 h. 4 m. morning.
A	26 37	10 17	Clock ſlow 21 ſec.
17	27 36	10 38	Mars ſets at 1 h. 22 m. morning.
18	28 34	10 59	
19	29 33	11 20	☉ enters ♉ 11 h. 13 m. night.
20	0 ♉ 31	11 40	
21	1 30	12 0	Twilight begins at 2 h. 38 m.
22	2 28	12 21	Seven Stars ſouth at 1 h. 32 m. afternoon.
A	3 26	12 41	Clock after the Sun 1 m. 53 ſec.
24	4 25	13 0	Day is 14 h. 22 m. long.
25	5 23	13 20	
26	6 21	13 39	Days are increaſed 6 h. 46 m.
27	7 20	13 58	
28	8 18	14 17	Saturn riſes at 2 h. 18 m. morning.
29	9 16	14 36	
A	10 14	14 54	

May xxxi Days.

Lunations.

Firſt Quarter 5th day, at 4 morning.
Full Moon 13th day, at 7 morning.
Laſt Quarter 21ſt day, at 1 morning.
New Moon 27th day, at 4 afternoon.

M D	Jupiter riſes	Venus ſets
1	4 m 22	8 a 23
7	4 2	8 41
13	3 41	8 58
19	3 21	9 15
25	3 0	9 32

M D	W D	Holy Days, ⊙ riſes and ſets	☽ riſes & ſets	☽'s Longit	☽'s Declin.	Aſpects and Weather
1	M	St. Phil. & James	11 a 57	25 ♊ 17	26 n 0	✱ ♂ ☿
2	Tu		morn	9 ♋ 22	24 38	Moiſt.
3	W	*Inv. of the Croſs*	0 39	22 58	21 50	Eaſter T. b. ☌ ⊙ ☿
4	Th		1 9	6 ♌ 6	17 57	
5	F	Sun riſes 4 29	1 33	18 51	13 22	☽ in Apogeo.
6	S	*St. John, a P. L.*	1 49	1 ♍ 16	8 21	□ ⊙ ♄
7	A	3 S. aft. Eaſter	2 4	13 28	3 6	
8	M		2 17	25 29	2 s 11	Variable weather,
9	Tu		2 30	7 ♎ 14	7 20	
10	W	Sun riſes 4 21	2 43	19 17	12 11	
11	Th	Sun ſets 7 41	2 59	1 ♏ 9	16 35	
12	F	*Old May Day*	3 17	13 2	20 21	✱ ⊙ ♂
13	S		☽ riſes	24 59	23 18	
14	A	4 S. aft. Eaſter	9 a 44	7 ♐ 1	25 14	
15	M		10 38	19 8	26 0	Dull and heavy.
16	Tu	Sun riſes 4 12	11 22	1 ♑ 23	25 31	
17	W	Sun ſets 7 50	11 56	13 48	23 45	
18	Th		morn	26 26	20 47	☽ in Perigeo.
19	F	Q. Charl. born	0 20	9 ♒ 18	16 44	*Dunſtan*
20	S		0 42	22 30	11 48	
21	A	Rogation Sun.	0 58	6 ♓ 3	6 11	△ ♄ ♀
22	M	Prs. Eliz. born	1 14	19 59	0 7	
23	Tu		1 31	4 ♈ 19	6 n 6	Variable to the end.
24	W		1 49	19 0	12 9	
25	Th	Aſcenſion Day	2 10	3 ♉ 57	17 36	
26	F	*Auguſtin*	2 36	19 2	21 57	
27	S	*Ven. Bede*	☽ ſets	4 ♊ 6	24 52	
28	A	Sun. aft. Aſcen.	9 a 38	18 59	25 59	
29	M	K. Cha. II. reſt.	10 31	3 ♋ 32	25 16	Term ends
30	Tu		11 6	17 40	22 54	☽ in Apogeo.
31	W		11 32	1 ♌ 21	19 16	

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Declin.	Long.	Declin.	Long.	Declin.	Long.	Declin.
1	16 ♒ 37	16 s 39	1 ♉ 1	10 n 52	15 ♋ 45	24 n 13	21 ♉ 40	18 n 0
7	16 50	16 36	2 27	11 22	19 9	23 44	29 3	20 0
13	17 0	16 34	3 51	11 51	22 35	23 9	6 ♊ 25	21 41
19	17 6	16 32	5 14	12 18	26 2	22 29	13 46	23 0
25	17 9	16 32	6 36	12 45	29 32	21 44	21 7	23 56

M D	Sun's Longit.	Sun's Declin.	Obſervations
1	11 ♉ 12	15 n 13	Clock after the Sun 3 min. 9 ſec.
2	12 10	15 31	
3	13 9	15 41	Mars ſets at 0 h. 58 min. morning
4	14 7	16 6	
5	15 5	16 23	Day breaks 1 h. 53 min.
6	16 3	16 40	Day is increaſed 7 h. 22 min.
A	17 1	16 56	Twilight ends 10 h. 18 min.
8	17 59	17 12	
9	18 56	17 28	
10	19 54	17 44	Saturn riſes at 1 h. 34 min. morning
11	20 52	18 0	Clock after the Sun 3 min. 37 ſec.
12	21 50	18 15	Mars ſets at 31 min. paſt midnight
13	22 48	18 30	
A	23 45	18 44	Seven Stars South at 8 min. paſt noon
15	24 43	18 58	Sun is Eaſt at 7 h. 4 min. morning
16	25 41	19 12	
17	26 39	19 26	Day breaks at 0 h. 58 min.
18	27 36	19 39	Day is 15 h. 42 min. long
19	28 34	19 52	
20	29 32	20 4	☉ enters ♊ 11 h. 48 min. morning
A	0 ♊ 29	20 17	
22	1 27	20 29	Days are increaſed 8 h. 10 min.
23	2 25	20 40	Clock after the Sun 3 min. 39 ſec.
24	3 22	20 51	Sun Eaſt 7 h. 11 min. morning
25	4 20	21 2	All Day, or Twilight, till the 23d of July
26	5 17	21 13	
27	6 15	21 23	
A	7 12	21 32	Day is 16 h. 6 min. long
29	8 10	21 42	
30	9 7	21 51	
31	10 5	21 59	☿ greateſt Elong. from ☉.

Lunations	M D	Jupiter riſes	Venus ſets
Firſt Quarter the 3d day, at 7 evening	1	2 m 34	9 a 46
Full Moon the 11th day, at 10 night	7	2 12	9 51
Laſt Quarter the 19th day, at 8 morning	13	1 50	9 54
New Moon the 25th day, at 12 night	19	1 28	9 55
	25	1 6	9 53

M D	W D	Holy-Days Sun riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	T	Nicomede	11 a 55	14 ♌ 35	14 n 46	Ox. T. en □ ♄ ☿
2	F		morn	27 24	9 44	Good weather.
3	S		0 8	9 ♍ 53	4 27	
4	A	Whit-ſunday	0 22	22 6	0 s 53	K. Geo. III. bo.
5	M	Whit-monday	0 35	4 ♎ 8	6 6	P. Er Aug. b. Bon.
6	T	Whit-tueſday	0 48	16 3	11 2	
7	W	Ember Week	1 3	27 55	15 33	△ ☉ ♄
8	T	Sun riſes 3 47	1 19	9 ♏ 48	19 29	Hail or rain.
9	F	Sun ſets 8 14	1 41	21 45	22 39	✶ ♃ ♀
10	S	Prs. Amelia b.	2 11	3 ♐ 48	24 50	
11	A	Trin. Sunday	☽ riſes	15 59	25 54	St. Barnabas
12	M		9 a 17	28 18	25 42	
13	T		9 54	10 ♑ 48	24 12	
14	W	Ox. Term beg.	10 21	23 29	21 27	☽ in Per. □ ♃ ♂
15	T	Corpus Chriſti	10 45	6 ♒ 22	17 36	
16	F	Trinity T. beg.	11 2	19 29	12 50	Seaſonable.
17	S	St. Alban	11 17	2 ♓ 51	7 23	
18	A	1 S. aft. Trin.	11 32	16 30	1 30	
19	M		11 49	0 ♈ 24	4 n 34	□ ♂ ♀
20	T	Tr. Ed. KWS	morn	14 35	10 31	△ ♄ ☿, ✶ ♂ ☿
21	W	Longeſt day	0 7	29 0	16 0	
22	T		0 29	13 ♉ 36	20 38	☍ ♄ ♂
23	F		1 1	28 17	24 1	
24	S	St. John Bapt.	1 44	12 ♊ 58	25 47	Gentle winds,
25	A	2 S. aft. Trin.	☽ ſets	27 31	25 46	
26	M		8 a 58	11 ♋ 50	24 1	☽ in Apogeo.
27	T		9 27	25 49	20 48	
28	W		9 50	9 ♌ 26	16 31	with ſoft ſhowers.
29	T	St. Peter	10 7	22 40	11 33	
30	F		10 22	5 ♍ 32	6 13	

M D	Saturn Long.	Saturn Decl.	Jupiter Long.	Jupiter Decl.	Mars Long.	Mars Declin	Venus Long.	Venus Decl.
1	17 ♒ 8	16 s 34	8 ♉ 10	13 n 14	3 ♌ 38	20 n 46	29 ♊ 41	24 n 29
7	17 3	16 37	9 28	13 39	7 10	19 51	7 ♋ 0	24 29
13	16 55	16 40	10 44	14 2	10 44	18 51	14 18	24 4
19	16 43	16 44	11 56	14 24	14 20	17 47	21 36	23 14
25	16 29	16 50	13 7	14 45	17 56	16 39	28 52	21 59

M D	Sun's Longit.	Sun's Declin.	Obſervations
1	11 ♊ 2	22 n 8	Clock after the Sun 2 min. 36 ſec.
2	12 0	22 15	
3	12 57	22 23	Saturn riſes at 1 min. paſt noon
A	13 54	22 30	Sun Eaſt at 7 h. 18 min.
5	14 52	22 36	Mars ſets at 11 h. 35 min. night
6	15 49	22 43	Day increaſed 8 h. 40 min.
7	16 47	22 49	Seven Stars ſouth at 10 h. 32 m. morning
8	17 44	22 54	
9	18 41	22 59	Day is 16 hours 28 min. long
10	19 39	23 4	
A	20 36	23 8	Saturn riſes at 11 h. 25 min. night
12	21 33	23 12	Clock ſlow 37 ſec.
13	22 30	23 15	Mars ſets at 11 h. 12 min. night
14	23 28	23 18	Sun Eaſt at 7 h. 20 min.
15	24 25	23 21	Clock and Sun are now together
16	25 22	23 23	
17	26 19	23 25	Days are increaſed 8 h. 50 min. which is their greateſt increaſe
A	27 17	23 26	
19	28 14	23 27	
20	29 11	23 28	⊙ enters ♋ 8 h. 29 min. night
21	0 ♋ 8	23 28	
22	1 6	23 28	Seven Stars ſouth at 9 h. 30 min. morn.
23	2 3	23 27	Days are decreaſed 2 minutes
24	3 0	23 26	
A	3 57	23 25	Sun is Eaſt 7 h. 20 min. morning
26	4 55	23 23	Day is 16 hours 32 min. long
27	5 52	23 20	
28	6 49	23 18	Saturn riſes at 10 h. 10 min. night
29	7 46	23 14	Mars ſets at 10 h. 23 min. night
30	8 44	23 11	

JULY XXXI Days.

Lunations

First Quarter the 3d day, at 10 morning
Full Moon the 11th day, at 11 morning
Laſt Quarter the 18th day, at 1 afternoon
New Moon the 25th day, at 9 morning

M D	Jupiter riſes	Venu ſets
1	0 m 43	9 a 5
7	0 21	9 4
13	0 0	9 3
19	11 a 38	9 2
25	11 16	9 1

M D	W D	Holy-Days Sun riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	S		10 a 35	18 ♍ 4	0 n 46	☌ ☉ ☿
2	A	3 S. aft. Trin.	10 48	0 ♎ 20	4 s 34	Viſitation
3	M	Dog-da. begin	11 2	12 23	9 39	✱ ♃ ♀
4	T	Tranſ. St. Ma.	11 19	24 19	14 20	Cam. commen
5	W	Trin. T. ends	11 39	6 ♏ 12	18 27	
6	T	Sun riſes 3 49	morn.	18 7	21 51	✱ ☉ ♃
7	F	Tho. à Beck.	0 4	0 ♐ 7	24 20	Cam. Term end
8	S		0 38	12 15	25 45	☍ ♄ ♀, □ ♃
9	A	4 S. aft. Trin	1 24	24 35	25 55	□ ♄ ♃
10	M	Oxford Act	2 22	7 ♑ 7	24 47	
11	T		☽ riſes	19 54	22 20	☽ in Perigeo
12	W	Sun riſes 3 5	8 a 44	2 ♒ 56	18 41	
13	T	Sun ſets 8	9 3	16 12	14 3	Stormy, with
14	F		9 20	29 42	8 40	ſome thunder,
15	S	St. Swithin	9 36	13 ♓ 24	2 48	Oxf. Term ends
16	A	5 S. aft. Trin.	9 51	27 18	3 n 16	
17	M		10 10	11 ♈ 21	9 15	then more mild
18	T	Sun riſes 4 0	10 30	25 31	14 47	
19	W	Sun ſets 7 59	10 57	9 ♉ 46	19 34	☍ ♄ ☿
20	T	Margaret	11 32	24 4	23 13	□ ♃ ♀
21	F		morn	8 ♊ 21	25 26	
22	S	Magdalen	0 22	22 34	25 59	Calm and plea-
23	A	6 S. aft. Trin.	1 26	6 ♋ 40	24 51	ſant to the end,
24	M		2 53	20 35	22 10	☽ in Apogeo
25	T	St. James	☽ ſets	4 ♌ 15	18 16	
26	W	St. Anne	8 a 7	17 38	13 31	
27	T		8 24	0 ♍ 44	8 15	☌ ♂ ♀
28	F	Sun riſes 4 15	8 39	13 32	2 45	with ſome
29	S		8 52	26 2	2 s 43	ſhowers.
30	A	7 S. aft. Trin.	9 7	8 ♎ 18	7 58	
31	M		9 22	20 22	12 50	

M D	Saturn Long.	Saturn Decl.	Jupiter Long.	Jupiter Decl.	Mars Long.	Mars Decl.	Venus Long.	Venus Decl.
1	16♒ 8	16 s 57	14♉15	15 n 6	21♌34	15 n 27	6♌ 9	20 n 22
7	15 49	17 3	15 17	15 24	25 14	14 12	13 24	18 25
13	15 27	17 11	16 17	15 40	28 55	12 54	20 38	16 11
19	15 3	17 18	17 13	15 55	2♍36	11 32	27 51	13 42
25	14 39	17 26	18 3	16 9	6 20	10 8	5♍ 2	11 0

M D	Sun's Longit.	Sun's Declin.	Obſervations
1	9♋41	23 n 7	Clock before the Sun 3 min. 23 ſec.
A	10 38	23 3	
3	11 35	22 58	Seven Stars ſouth at 8 h. 45 min. morning
4	12 32	22 53	Saturn riſes at 9 h. 44 min. evening
5	13 30	22 47	
6	14 27	22 41	Mars ſets at 10 h. 5 min. night
7	15 24	22 35	Sun is Eaſt at 7 h. 18 min.
8	16 21	22 28	
A	17 18	22 21	Day is 16 hours 18 minutes long
10	18 15	22 13	☽ eclipſed, inviſible
11	19 13	22 5	
12	20 10	21 57	Day decreaſed 22 minutes
13	21 7	21 48	Clock faſt 5 min. 16 ſec.
14	22 4	21 39	
15	23 2	21 30	Saturn riſes at 8 h. 58 min. evening
A	23 59	21 20	Day is 16 hours 4 minutes long
17	24 56	21 10	Mars ſets at 9 h. 33 min. night
18	25 53	21 0	
19	26 51	20 49	Sun is Eaſt at 7 h. 8 min. morning
20	27 48	20 38	Clock faſt 5 min. 53 ſec.
21	28 45	20 26	
22	29 43	20 14	Sun enters ♌ 7 h. 19 min. morning
A	0♌40	20 2	
24	1 37	19 49	⊙ eclipſed, inviſible.
25	2 35	19 36	Seven Stars ſouth at 7 h. 12 min. morning
26	3 32	19 23	
27	4 29	19 10	Day is 15 h. 36 min. long
28	5 27	18 56	Day is decreaſed 1 h. 2 min.
29	6 24	18 42	
A	7 22	18 27	Day breaks at 1 h. 11 min.
31	8 11	18 12	

AUGUST xxxi Days.

Lunations

Firſt Quarter the 2d day, at 3 morning
Full Moon the 9th day, at 10 night
Laſt Quarter the 16th day, at 5 evening
New Moon the 23d day, at 8 night
Firſt Quarter the 31ſt day, at 9 night

M D	Jupiter riſes	Venu ſets
1	10 a 50	8 a 57
7	10 29	8 45
13	10 7	8 32
19	9 46	8 18
25	9 25	8 6

M D	W D	Holy-Days ☉ riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	T	Lammas-day	9 a 41	2 ♏ 18	17 s 10	
2	W		10 5	14 11	20 49	Serene and
3	T	Sun riſes 4 23	10 35	26 5	23 37	ſeaſonable.
4	F	Sun ſets 7 36	11 15	8 ♐ 6	25 23	
5	S		morn	20 17	25 59	☍ ☉ ♄
6	A	8 S. aft. Trin.	0 6	2 ♑ 42	25 19	Transfig. △ ♃ ♀
7	M	Prs. Ameliabo.	1 11	15 24	23 19	Name of Jeſus
8	T		2 26	28 26	20 3	(☽ inPer.
9	W		☽ riſes	11 ♒ 48	15 41	
10	T	St. Laurence	7 a 27	25 28	10 26	Storms.
11	F	Prs. Brunſ. bo.	7 44	9 ♓ 25	4 34	Dog-days end
12	S	Pr. of Walesb.	7 59	23 35	1 n 36	O. Lam d □ ☉ ♃
13	A	9 S. aft. Trin.	8 16	7 ♈ 52	7 44	
14	M		8 37	22 13	13 30	☌ ♂ ☿
15	T	Aſſumption	9 3	6 ♉ 33	18 31	More ſerene.
16	W	Pr. Fred. bo.	9 36	20 48	22 26	△ ♃ ♂, △ ♃ ☿
17	T		10 20	4 ♊ 57	24 59	
18	F	Sun riſes 4 49	11 19	18 57	25 57	
19	S	Sun ſets 7 10	morn	2 ♋ 47	25 16	☌ ♂ ☿
20	A	10 S. aft. Trin.	0 29	16 26	23 5	☽ in Apogeo
21	M	Pr. W. H. b.	1 50	29 54	19 37	
22	T		3 5	13 ♌ 11	15 11	Hot and dry,
23	W		☽ ſets	26 14	10 7	with ſome
24	T	St. Bartholo.	6 a 49	9 ♍ 5	4 44	
25	F		7 3	21 42	0 s 45	△ ♄ ♀
26	S	Sun riſes 5 3	7 18	4 ♎ 6	6 6	
27	A	11 S. aft. Trin.	7 34	16 17	11 8	flying ſhowers.
28	M	S.t Anguſtine	7 51	28 19	15 40	
29	T	Beh. JohnBap.	8 13	10 ♏ 14	19 34	
30	W		8 40	22 5	22 39	
31	T		9 16	3 ♐ 5	24 46	

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	14♒ 9	17 s 36	18♉56	16 n 22	10♍42	8 n 27	13♍24	7 n
7	13 42	17 44	19 36	16 32	14 28	6 57	20 32	4 3
13	13 15	17 52	20 10	16 40	18 16	5 25	27 38	1 3
19	12 49	18 0	20 38	16 46	22 5	3 52	4♎11	1 s 3
25	12 24	18 7	20 59	16 51	25 55	2 18	11 43	4 3

M D	Sun's Longit.	Sun's Declin.	Observations
1	9♌17	17 n 57	Clock before the Sun 5 min. 54 ſec.
2	10 14	17 42	
3	11 12	17 26	Saturn ſets at 4 h. 44 min. morning
4	12 9	17 10	Seven Stars ſouth at 6 h. 37 min.
5	13 6	16 54	Mars ſets at 8 h. 39 min. night
A	14 4	16 38	Day breaks at 1 h. 43 min.
7	15 2	16 21	Sun Eaſt at 6 h. 54 min. morning
8	15 59	16 4	
9	16 57	15 47	Day is 14 hours 54 minutes long
10	17 54	15 29	☿ greateſt Elong. from the Sun
11	18 52	15 11	
12	19 49	14 53	Clock before the Sun 4 min. 37 ſec.
A	20 47	14 35	Day breaks at 2 h. 8 min.
14	21 45	14 16	
15	22 42	13 58	Twilight ends at 9 h. 44 min.
16	23 40	13 39	Days are decreaſed 2 h. 4 min.
17	24 38	13 20	
18	25 36	13 0	Saturn ſets at 3 h. 40 min. morning
19	26 33	12 41	Day is 14 h. 20 min. long
A	27 31	12 21	Mars ſets at 7 h. 57 min. evening
21	28 29	12 1	
22	29 27	11 41	☉ enters ♍ 1 h. 38 min. afternoon
23	0♍25	11 20	
24	1 23	11 0	Clock faſt 2 min.
25	2 21	10 39	Sun Eaſt at 6 h. 33 min. morning
26	3 19	10 18	Seven Stars ſouth at 5 h. 14 min. morning
A	4 17	9 57	
28	5 15	9 36	Day is 13 h. 46 min. long
29	6 13	9 14	Day decreaſed 3 h. 2 min.
30	7 11	8 53	
31	8 9	8 31	Clock and Sun are now together

SEPTEMBER XXX Days.

Lunations

Full Moon the 8th day, at 8 morning
Laſt Quarter the 14th day, at 11 night
New Moon the 22d day, at 11 morning
Firſt Quarter the 30th day, at 3 afternoon

M D	Jupiter riſes	Venus ſets
1	9 a 0	7 a 52
7	8 39	7 40
13	8 18	7 29
19	7 56	7 18
25	7 34	7 9

M D	W D	Holy-Days ☉ riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	F	Giles	10 a 2	15 ♐ 56	25 s 47	△ ♃ ☿
2	S	Lond.b.1666.	11 0	28 5	25 36	Dark clouds,
3	A	12 S. aſt. Trin.	morn	10 ♑ 30	24 8	☽ in Perigeo
4	M		0 9	23 16	21 24	
5	T	Sun riſes 5 23	1 27	6 ♒ 25	17 30	with wind.
6	W	Sun ſets 6 36	2 48	20 0	12 35	
7	T	Enurchus	4 11	3 ♓ 59	6 54	☌ ☉ ☿
8	F	Nat. B. V. M.	☽ riſes	18 20	0 44	
9	S		6 a 35	2 ♈ 57	5 n 35	More ſerene.
0	A	13 S. aſt. Trin.	6 50	17 42	11 38	
11	M		7 15	2 ♉ 28	17 2	
12	T	Sun riſes 5 36	7 45	17 6	21 23	
13	W		8 29	1 ♊ 33	24 20	△ ☉ ♃
14	T	Holy Croſs	9 24	15 43	25 41	Cloudy
15	F		10 29	29 36	25 23	☽ in Apogeo
16	S	Sun ſets 6 16	11 45	13 ♋ 13	23 34	Lambert
17	A	14. S aſt. Trin.	morn	26 34	20 27	
18	M		1 4	9 ♌ 42	16 20	△ ♄ ♂, ✱ ♀ ☿
19	T		2 21	22 36	11 32	□ ♄ ♀
20	W	Ember Week	3 37	5 ♍ 20	6 19	
21	T	St. Matthew	4 50	17 53	0 56	Variable to
22	F	K. Geo. III. cr.	☽ ſets	0 ♎ 16	4 s 25	the end.
23	S		5 a 49	12 30	9 31	
24	A	15 S. aſt. Trin.	6 6	24 35	14 12	
25	M		6 27	6 ♏ 32	18 16	
26	T	St. Cyprian	6 51	18 24	21 35	
27	W		7 24	0 ♐ 13	24 0	
28	T	Sun riſes 6 7	8 6	12 3	25 21	☍ ♃ ♀
29	F	St. Michael	8 58	23 59	25 34	Prs. Ch. Aug. bo.
30	S	St. Jerome	10 2	6 ♑ 4	24 34	(△ ♃ ☿

September, 1786.

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	11 ♒ 57	18 s 15	21 ♉ 16	16 n 55	0 ♎ 25	0 n 27	19 ♎ 52	8 s 9
7	11 35	18 21	21 22	16 50	4 19	1 s 9	26 48	11 5
13	11 17	18 26	21 21	16 55	8 14	2 45	3 ♏ 40	13 54
19	11 1	18 31	21 13	16 51	12 11	4 21	10 29	16 32
25	10 48	18 4	20 58	16 46	16 9	5 56	17 12	18 56

M D	Sun's Longit.	Sun's Declin.	Obſervations
1	9 ♍ 7	8 n 9	Saturn ſets at 2 h. 44 min. morning
2	10 6	7 47	
A	11 4	7 26	Mars ſets at 7 h. 21 min. evening
4	12 2	7 3	Day decreaſed 3 h. 13 min.
5	13 0	6 41	
6	13 59	6 19	Seven Stars ſouth at 4 h. 34 min.
7	14 57	5 56	Day breaks at 3 h. 22 min.
8	15 55	5 34	
9	16 53	5 11	Day is 13 hours long
A	17 52	4 48	
11	18 50	4 25	Days are decreaſed 3 h. 42 min.
12	19 49	4 2	Clock before the Sun 3 min. 59 ſec.
13	20 47	3 39	Saturn ſets at 1 h. 57 min. morning
14	21 46	3 16	
15	22 44	2 53	Day breaks at 3 h. 42 min.
16	23 43	2 30	Sun is due Eaſt at 6 h. 2 min.
A	24 42	2 7	Mars ſets at 6 h. 45 min. afternoon
18	25 40	1 43	
19	26 39	1 20	
20	27 38	0 57	Twilight ends at 8 h. 6 min.
21	28 37	0 33	Seven Stars ſouth at 3 h. 41 min. morn.
22	29 35	0 10	☉ enters ♎ 10 h. 3 min. morn. ☿ great Elong. from ☉.
23	0 ♎ 34	0 s 14	
A	1 33	0 37	Day is 12 hours long
25	2 32	1 1	
26	3 31	1 24	Days are decreaſed 4 h. 42 min.
27	4 30	1 47	Clock before the Sun 8 min. 49 ſec.
28	5 29	2 11	
29	6 28	2 34	Day breaks at 4 h. 13 min.
30	7 27	2 58	

OCTOBER XXXI Days.

Lunations

Full Moon the 7th day at 5 afternoon
Laſt Quarter the 14th day, at 8 morning
New Moon the 22d day, at 3 morning
Firſt Quarter the 30th day, at 7 morning

M D	Jupiter riſes	Venus ſets
1	7 a 13	7 a 0
7	6 49	6 54
13	6 25	6 50
19	6 1	6 47
25	5 37	6 46

M D	W D	Holy-Days ☉ riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	A	16S.aft.Trin.	11 a 15	18 ♑ 26	22 s 21	Remig. ☽ in Per.
2	M		morn	1 ♒ 8	18 59	⚹ ♀ ☿
3	T	Sun riſes 6 18	0 32	14 16	14 36	△ ☉ ♄
4	W	Sun ſets 5 40	1 52	27 52	9 29	
5	T		3 15	11 ♓ 58	3 25	Rain or ſnow
6	F	Faith	4 39	26 31	2 n 50	
7	S		☽ riſes	11 ♈ 25	9 5	about this time.
8	A	17 S.aft.Trin.	5 a 27	26 33	14 53	
9	M	St. Denys	5 53	11 ♉ 42	19 46	
10	T	Ox.&Ca.T.b.	6 33	26 43	23 19	△ ♄ ☿
11	W		7 25	11 ♊ 28	25 13	
12	T		8 30	25 50	25 23	
13	F	Tr.KEd.Con.	9 43	9 ♋ 50	23 4	☽ in Apogeo
14	S		11 3	23 25	21 2	
15	A	18 S.aft.Trin.	morn	6 ♌ 40	17 8	Changeable
16	M		0 20	19 36	12 31	⚹ ♄ ♀
17	T	Etheldred	1 35	2 ♍ 16	7 27	
18	W	St. Luke	2 47	14 45	2 10	High winds.
19	T		3 59	27 3	3 s 6	
20	F	Sun riſ. 6 50	4 10	9 ♎ 13	8 12	
21	S	Sun ſets 5 8	5 19	21 17	12 56	☌ ☉ ☿
22	A	19 S.aft.Trin.	☽ ſets	3 ♏ 14	17 9	
23	M		5 a 4	15 8	20 38	Dull and diſmal.
24	T		5 32	26 58	23 16	
25	W	K. G. III. ac.	6 11	8 ♐ 47	24 53	Criſpin
26	T	K.G.III. pro	7 0	20 37	25 23	
27	F		7 59	0 ♑ 32	24 43	☌ ♂ ☿
28	S	St.Sim. & Jude	9 6	14 37	22 53	☽ inPer. □ ♄ ☿
29	A	20S.aft.Trin.	10 18	26 55	19 57	
30	M		11 34	9 ♒ 33	16 1	
31	T		morn	22 34	11 13	□ ♄ ♂

M	Saturn		Jupiter		Mars		Venus.	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	10 ♒ 38	18 s 37	20 ♉ 36	16 n 40	20 ♎ 9	7 s 31	23 ♏ 52	21 s 8
7	10 32	18 39	20 8	16 32	24 10	9 3	0 ♐ 25	23 1
13	10 30	18 39	19 34	16 23	28 14	10 35	6 50	24 36
19	10 30	18 39	18 53	16 11	2 ♏ 19	12 4	13 6	25 49
25	10 35	18 37	18 10	16 0	6 26	13 31	19 12	26 42

M D	Sun's Longit.	Sun's Declin.	Observations
A	5 ♎ 26	3 s 21	Clock after the Sun 10 min. 27 ſec.
2	9 25	3 44	
3	10 24	4 8	Saturn ſets at 41 min. paſt midnight
4	11 24	4 31	Sun is Eaſt at 5 h. 42 min.
5	12 23	4 54	Mars ſets at 5 h. 53 min. afternoon
6	13 22	5 17	Clock ſlow 11 min. 57 ſec.
7	14 21	5 40	
A	15 21	6 3	Seven Stars ſouth at 2 h. 39 min. morning
9	16 20	6 26	Day is 11 hours 2 minutes long
10	17 19	6 49	
11	18 19	7 11	Day breaks at 4 h. 39 min.
12	19 18	7 34	Twilight ends at 7 h. 19 min.
13	20 18	7 56	
14	21 17	8 19	Clock after the Sun 14 min.
A	22 17	8 41	
16	23 17	9 3	Seven Stars ſouth at 2 h. 9 min. morning
17	24 16	9 25	
18	25 16	9 47	Saturn ſets at 11 h. 43 min. night
19	26 16	10 9	Day breaks 4 h. 55 min.
20	27 16	10 31	Mars ſets at 5 h. 13 min. afternoon.
21	28 15	10 52	
A	29 15	11 13	Sun enters ♏ 5 h. 57 min. afternoon.
23	0 ♏ 15	11 34	
24	1 15	11 55	☿ greateſt Elong. from the Sun
25	2 15	12 16	
26	3 15	12 37	
27	4 15	12 57	Day is 9 h. 54 min. long
28	5 15	13 17	
A	6 15	13 37	Day breaks at 5 h. 12 min.
30	7 15	13 57	
31	8 15	14 16	

NOVEMBER XXX Days.

Lunations

Full Moon the 6th day, at 2 morning
Laſt Quarter the 12th day, at 8 night
New Moon the 20th day, at 10 night
Firſt Quarter the 28th day, at 9 night

M D	Jupiter ſets	Venus ſets
1	8 m 1	6 a 39
7	7 33	6 39
13	7 5	6 38
19	6 37	6 38
25	6 8	6 38

M D	W D	Holy-Days ☉ riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	W	All Saints	0 m 53	6 ♓ 3	5 s 44	
2	T	Pr. Edward b	2 14	20 2	0 n 12	All Souls □ ☉ ♄
3	F	Prs. Sophia bo	3 35	4 ♈ 32	6 20	(☍ ♃ ☿
4	S		5 2	19 26	12 18	Cold weather
5	A	21 S. aft. Trin	6 31	4 ♉ 39	17 37	Powder Plot
6	M	Leonard	☽ riſes	20 0	21 50	Mich. T. begins
7	T	D. Cumb. bo	5 a 14	5 ♊ 17	24 29	☌ ☉ ♂
8	W	Ps. Aug. So b	6 17	20 18	25 20	☍ ☉ ♃, ☍ ♃ ♂
9	T	Ld. May. day	7 28	4 ♋ 58	24 22	☽ in Apogeo
10	F	Sun ſets 4 32	8 49	19 11	21 49	
11	S	St. Martin	10 8	2 ♌ 56	18 4	
12	A	22 S. aft. Trin.	11 26	16 15	13 32	Cloudy and
13	M	Britius	morn	29 10	8 30	unſettled wea-
14	T		0 40	11 ♍ 47	3 14	ther.
15	W	Machutus	1 51	24 8	2 s 1	
16	T		3 1	6 ♎ 18	7 8	
17	F	Hugh	4 9	18 20	11 54	
18	S		5 18	0 ♏ 15	16 12	✶ ♄ ☿
19	A	23 S. aft. Trin.	6 27	12 8	19 51	△ ♃ ♀
20	M	Edmund	☽ ſets	23 59	22 40	Froſty air,
21	T	Sun riſes 7 45	4 a 8	5 ♐ 49	24 30	
22	W	Cecilia	4 54	17 42	25 15	OldMartinm. d.
23	T	St. Clement	5 49	29 37	24 50	
24	F	Sun ſets 4 11	6 55	11 ♑ 3	23 15	☽ in Perigeo
25	S	D. Glouc. b.	8 5	23 49	20 35	Catherine
26	A	24 S. aft. Trin.	9 18	6 ♒ 11	16 56	
27	M		10 32	18 49	12 27	and ſo con-
28	T	Mic. Ter. ends	11 48	1 ♓ 47	7 18	tinues, with
29	W		morn	15 9	1 42	ſmall variation.
30	T	St. Andrew	1 6	28 57	4 n 10	

M D	Saturn Long.	Saturn Decl.	Jupiter Long.	Jupiter Decl.	Mars Long.	Mars Decl.	Venus Long.	Venus Decl.
1	10 ♒ 45	18 s 35	17 ♉ 14	15 n 44	11 ♏ 16	15 s 8	26 ♐ 1	27 s 15
7	10 58	18 31	16 25	15 31	15 27	16 26	1 ♑ 32	27 22
13	11 14	18 26	15 37	15 18	19 39	17 41	6 41	27 7
19	11 33	18 21	14 49	15 5	23 53	18 50	11 22	26 34
25	11 55	18 15	14 4	14 52	28 8	19 54	15 26	25 46

M D	Sun's Longit	Sun's Declin.	Obſervations
1	9 ♏ 15	14 s 36	Clock after the Sun 16 min. 13 ſec.
2	10 15	14 55	
3	11 16	15 14	Saturn ſets at 10 h. 42 min. afternoon
4	12 16	15 32	Day decreaſed 7 hours 12 min.
A	13 16	15 50	Day is 9 h. 20 min. long
6	14 16	16 18	Seven Stars ſouth at 49 m. paſt midnight
7	15 17	16 26	
8	16 17	16 44	Mars ſets at 4 h. 35 min. afternoon
9	17 17	17 0	Clock ſlow 15 min. 55 ſec.
10	18 18	17 18	
11	19 18	17 34	Day breaks at 5 h. 30 min.
A	20 19	17 51	Twilight ends at 6 h. 29 min.
13	21 19	18 7	
14	22 20	18 22	Day is 8 h. 50 min. long
15	23 20	18 38	
16	24 21	18 53	Clock after the Sun 14 min. 53 ſec.
17	25 21	19 8	
18	26 22	19 22	Saturn ſets at 9 h. 45 min. night
A	27 23	19 36	Sun is Eaſt 4 h. 54 min.
20	28 23	19 50	
21	29 24	20 3	Sun enters ♐ 2 h. 10 min. afternoon
22	0 ♐ 25	20 16	
23	1 26	20 28	Mars ſets at 3 h. 58 min. afternoon
24	2 26	20 40	Seven Stars ſouth 11 h. 33 min. afternoon
25	3 27	20 52	
A	4 28	21 4	Day is 8 h. 16 min. long
27	5 29	21 15	Days are decreaſed 8 hours 20 minutes
28	6 30	21 25	
29	7 31	21 35	Day breaks at 5 h. 53 minutes
30	8 32	21 45	

DECEMBER XXXI Days.

Lunations	M D	Jupiter ſets	Venus ſets
Full Moon the 5th day, at 1 afternoon	1	5 m 39	6 a 33
Laſt Quarter the 12th day, at noon	7	5 10	6 16
New Moon the 20th day, at 5 afternoon	13	4 41	5 58
Firſt Quarter the 28th day, at 8 morning	19	4 12	5 40
	25	3 42	5 22

M D	W D	Holy-Days ☉ riſes & ſets	☽ riſes & ſets	Moon's Longit.	Moon's Declin.	Aſpects and Weather
1	F		2 m 27	13 ♈ 12	10 n 0	
2	S		3 52	27 51	15 27	Wind and rain
3	A	Advent Sund.	5 21	12 ♉ 51	20 5	
4	M	Sun riſes 8 0	6 48	28 3	23 26	✶ ☉ ♄
5	T	Sun ſets 3 59	☽ riſes	13 ♊ 17	25 7	
6	W	Nicholas	4 a 52	28 22	24 55	□ ♄ ♃
7	T		6 12	13 ♋ 11	22 56	☽ in Apogeo
8	F	Conception	7 36	27 35	19 31	
9	S		8 57	11 ♌ 32	15 3	Windy.
10	A	2 S. in Advent	10 13	25 1	9 59	
11	M	Sun riſes 8 5	11 28	8 ♍ 5	4 38	Showers of rain
12	T	Sun ſets 3 54	morn.	2 46	0 s 45	
13	W	Lucy	0 40	3 ♎ 8	5 58	or ſnow.
14	T		1 49	15 16	10 51	
15	F		2 57	27 14	15 16	
16	S	Cam. T. ends	4 7	9 ♏ 6	19 4	O Sap. ✶ ♄ ♂
17	A	3 S. in Advent	5 15	20 56	22 5	
18	M	Oxf. T. ends	6 19	2 ♐ 47	24 10	Tempeſtuous.
19	T		7 19	14 40	25 11	
20	W	Ember Week	☽ ſets	26 39	25 2	
21	T	St. Thomas	4 a 32	8 ♑ 45	23 41	Short d. ☽ in Per.
22	F		5 43	20 59	21 13	
23	S		6 56	3 ♒ 23	17 44	☌ ☉ ☿
24	A	4 S. in Advent	8 10	15 58	13 25	
25	M	Chriſtmas-day	9 24	28 48	8 26	So concludes
26	T	St. Stephen	10 40	11 ♓ 53	2 59	
27	W	St. John	11 56	25 16	2 n 43	the year.
28	T	H. Innocents	morn.	8 ♈ 58	8 24	
29	F		1 18	23 0	13 48	
30	S		2 41	7 ♉ 22	18 35	☌ ♂ ☿
31	A	Sun. af. Chriſt	4 5	21 56	22 19	Silveſter

December, 1786.

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	12 ♒ 21	18 s 7	13 ♉ 22	14 n 41	2 ♐ 27	20 s 52	18 ♑ 53	24 s 47
7	12 49	17 59	12 45	14 31	6 46	21 43	21 0	23 40
13	13 21	17 50	12 15	14 24	11 7	22 27	22 4	22 28
19	13 54	17 40	11 50	14 18	15 30	23 3	21 43	21 14
25	14 29	17 30	11 33	14 14	19 55	23 31	19 55	20 1

M D	Sun's Longit.	Sun's Declin.	Obſervations
1	9 ♐ 32	21 s 54	Clock after the Sun 10 min. 28 ſec.
2	10 33	22 3	Saturn ſets at 8 h. 51 min. night
A	11 34	22 12	Sun Eaſt at 4 h. 44 min.
4	12 35	22 20	
5	13 36	22 28	☿ greateſt Elong. from the Sun
6	14 37	22 35	
7	15 38	22 42	Seven Stars ſouth at 10 h. 35 min. night
8	16 39	22 48	Day is 7 h. 54 min. long
9	17 40	22 54	Days are decreaſed 8 h. 54 minutes
A	18 41	22 59	Day breaks at 5 h. 59 min.
11	19 42	23 4	Twilight ends at 6 h. 1 min.
12	20 43	23 9	
13	21 44	23 13	Saturn ſets at 8 h. 8 min night
14	22 45	23 16	Clock ſlow 4 min. 46 ſec.
15	23 47	23 19	Mars riſes at 7 h. 12 min. morning
16	24 48	23 22	Day breaks 6 hours
A	25 49	23 24	
18	26 50	23 26	Clock after the Sun 2 min. 47 ſec.
19	27 51	23 27	
20	28 52	23 28	Sun eclipſed inviſible
21	29 54	23 28	Sun enters ♋ 2 h. 33 min. morning
22	0 ♑ 55	23 28	
23	1 56	23 27	Day breaks at 6 h. 1 min.
A	2 57	23 26	Day-light ends at 5 h. 59 min.
25	3 58	23 24	
26	4 59	23 22	Sun is due Eaſt at 4 h. 40 min. morning
27	6 1	23 20	Day is 7 h. 46 min. long
28	7 2	23 17	
29	8 3	23 13	Days are increaſed 4 minutes
30	9 4	23 9	
A	10 5	23 6	

Mercury's Longitude and Declination, for 1786.

Days	Long.	Declin.	Long.	Declin.	Long.	Declin.
	January	January	February	February	March	March
1	25 ♑ 27	20 s 11	17 ♑ 31	21 s 38	26 ♒ 46	14 s 37
4	23 36	19 35	20 49	21 39	1 ♓ 52	12 51
7	19 59	19 17	24 25	21 30	7 7	10 54
10	16 2	19 16	28 16	21 10	12 32	8 45
13	12 38	19 27	2 ♒ 19	20 39	18 8	6 24
16	10 28	19 47	6 33	19 58	23 54	3 53
19	9 40	20 12	10 58	19 3	29 50	1 13
22	10 8	20 38	15 51	17 57	5 ♈ 53	1 n 34
25	11 34	21 3	20 14	16 40	11 59	4 25
28	13 45	21 23	25 7	15 9	18 3	7 1
	April	April	May	May	June	June
1	25 ♈ 48	10 n 53	15 ♉ 24	17 n 23	16 ♉ 58	13 n 3
4	1 ♉ 9	13 20	13 36	16 2	20 18	14 4
7	5 56	15 27	11 47	14 39	24 7	16 5
10	10 1	17 11	10 12	13 23	28 22	17 30
13	13 18	18 29	9 7	12 22	3 ♊ 5	18 58
16	15 45	19 22	8 38	11 40	8 13	20 24
19	17 19	19 48	8 49	11 20	13 46	21 44
22	17 58	19 48	9 41	11 21	19 41	22 54
25	17 48	19 21	11 12	11 42	25 56	23 47
28	16 53	18 30	13 18	12 21	2 ♋ 22	24 1
	July	July	Auguſt	Auguſt	September	September
1	8 ♋ 53	24 n 26	4 ♍ 40	9 n 43	21 ♍ 8	0 s 31
4	15 22	24 8	8 31	7 51	18 37	0 n 4
7	21 42	23 27	12 4	6 2	15 39	2 2
10	27 50	22 25	15 16	4 19	12 46	4 9
13	3 ♌ 42	21 6	18 4	2 44	10 35	5 53
16	9 19	19 34	20 24	1 20	9 34	7 11
19	14 39	17 53	22 11	0 9	10 0	7 51
22	19 43	16 4	23 19	0 s 43	11 50	7 51
25	24 31	14 12	23 41	1 12	14 53	7 11
28	29 1	12 17	23 13	1 17	18 52	5 5
	October	October	November	November	December	December
1	23 ♍ 29	2 n 19	15 ♏ 32	17 s 0	29 ♐ 42	25 s 5
4	28 29	2 23	20 14	18 38	3 ♑ 18	25 3
7	3 ♎ 40	0 15	24 53	20 8	6 23	25 1
10	8 54	1 s 58	29 29	21 29	8 40	24 37
13	14 8	4 13	4 ♐ 2	22 40	9 51	23 54
16	19 18	6 27	8 32	23 41	9 31	23
19	24 23	8 37	12 58	24 30	7 28	22 15
22	29 24	10 44	17 21	25 9	3 59	21 2
25	4 ♏ 20	12 44	21 38	25 35	29 ♐ 54	20 4
28	9 11	14 39	25 47	25 49	26 24	20 1

A Compendious Chronology of memorable Things ſince the Creation to this preſent Year.

A.P.J.	*before Chriſt.*		*Years ſince.*
710	4004	The Creation of the World	5790
1766	2948	*Noah* born	4734
2366	2348	*Noah*'s Flood began	4134
2481	2233	The *Babylonian* Monarchy eſtabliſhed	4019
2718	1996	*Abraham* born	3782
2986	1728	*Joſeph* ſold into *Egypt*	3514
3143	1571	*Moſes* born	3357
3223	1491	The *Iſraelites* Departure out of *Egypt*	3277
3530	1184	*Troy* taken and deſtroyed by the *Greeks*	2970
3710	1004	*Solomon*'s Temple built and dedicated	2789
4126	588	*Jeruſalem* and the Temple deſtroyed	2374
4176	538	*Daniel* delivered from the Den of Lions	2324
4198	516	The Temple of *Jeruſalem* rebuilt	2302
4391	323	The Death of *Alexander the Great*	2109
4710	4	The true Year of *Chriſt*'s Birth	1790
4714	0	The vulgar Year of *Chriſt*'s Birth	1786
A.D			
33		The Paſſion and Reſurrection of *Jeſus Chriſt*	1753
70		*Jeruſalem* and the Temple deſtroyed by *Titus*	1716
100		St. *John*, the laſt of the Apoſtles, dies *Dec.* 20.	1686
313		Chriſtianity triumphs under *Conſtantine*	1473
476		*Auguſtulus*, the laſt *Roman* Emperor, depoſed	1310
606		The wicked *Phocas* makes Pope *Boniface* Head of the Church	1180
608		*Mahomet* broaches his Impoſture at *Mecca*	1178
872		*Italy* and *Rome* plundered by the *Saracens*	914
1012		*Swain* King of *Denmark* conquers *England*	774
1066		*William* Duke of *Normandy* conquers *England*	720
1110		Arts and Sciences taught in *Cambridge*	676
1119		The firſt War between the *French* and *Engliſh*	567
1300		The Mariners Compaſs invented	486
1330		The *Canaries* diſcovered by an *Engliſh* Ship	456
1380		Gunpowder and the Uſe of Guns firſt found out	406
1453		*Conſtantinople* taken from the *Chriſtians*	333

A.D.		Years ſince.
1463	The *Perſians* conquered by *Tamerlane*	323
1500	*Rome* plundered by the Duke of *Bourbon*	286
1517	*Martin Luther* firſt diſputed againſt Popery	268
1536	*England* ſeparated from the Church of *Rome*	250
1588	The *Spaniſh Armada* defeated by the *Engliſh*	196
1603	Q. *Eliz.* dies *March* 24, and K. *James* I. began	183
1604	Died of the Plague in *London*, in 2 Years, 68,596	182
1605	Gunpowder Treaſon, *Nov.* 5.	181
1613	The New-River Water brought to *London*	173
1618	The excellent Sir *Walter Raleigh* beheaded	168
1625	K. *James* I. died, King *Charles* I. began, *Mar.* 27.	161
1625	35,417 Perſons died of the Plague in *London*	161
1641	The cruel *Iriſh* Maſſacre began, *October* 23.	145
1643	*Burleigh-Houſe* ſtormed by *Cromwel*, *July* 24.	143
1649	K. *Charles* I. beheaded, *January* 30.	137
1658	*Oliver Cromwell* died.	128
1660	K. *Charles* II. reſtored, *May* 29.	126
1665	68,586 Perſons died of the Plague in *London*	121
1666	*London* burnt, and a great Sea-Fight with the *Dutch*	120
1672	War declared againſt the *Dutch*, *March* 17.	114
1674	A great Snow for 11 Days together	112
1675	The Town of *Northampton* burnt, *Sept.* 3.	111
1680	A great and ſplendid Comet appeared	106
1684	The great Froſt that held 13 Weeks	102
1685	K. *Charles* II. died, *Feb.* 6. and K. *James* II. began	101
1685	The Duke of *Monmouth* beheaded, *July* 15.	101
1688	Seven Biſhops ſent to the *Tower*, *June* 8.	98
1688	K. *James* II. abdicated, *December* 12.	98
1689	K. *William* and Q. *Mary* crowned, *April* 11.	97
1692	The *French* Fleet entirely defeated by the *Engliſh*	94
1698	*Whitehall* Palace deſtroyed by Fire.	88
1702	K. *William* died, *March* 8, and Q. *Anne* began	84
1702	Q. *Anne* proclaimed War againſt *France*, *May* 4.	84
1703	A great and terrible Wind, *Nov.* 26 and 27.	83
1704	*Gibraltar* taken by the *Engliſh*	82
1707	*England* and *Scotland* united, *May* 1.	79
1710	Riots and great Diſturbances in *England*.	76
1714	Q. *Anne* died *Auguſt* 1. and K. *George* I. began	72

A.D.		*Years ſince.*
1715	A Rebellion in *Scotland* and *Lancaſhire* ſuppreſſed	71
1716	A great Froſt in the Beginning of this Year	70
1718	The *Spaniſh* Fleet deſtroyed by Admiral *Byng*.	68
1719	A ſurprizing Meteor ſeen, *March* 19, at 8 at Night	67
1719	Mr. *Flamſteed*, a celebrated Aſtronomer died *Dec.* 31.	67
1727	The incomparable Sir *Iſaac Newton*, died *Mar.* 20.	59
1727	K. *George* I. died, *June* 11, and K. *George* II. began	59
1736	The Prince and Princeſs of *Wales* married, *Ap.* 27.	50
1739	Letters of Marque publiſhed in *London* againſt the *Spaniards*, *July* 16.	47
1739	War declared by *Great Britain* againſt *Spain*.	47
1739	*Porto-Bello* taken and deſtroyed by Admiral *Vernon*.	47
1740	A very ſevere Froſt from *Dec.* 25, to *Feb.* 27.	46
1742	A Comet appeared from *Feb.* 18, to *March* 14.	44
1743	A ſplendid Comet appeared from *December* 23, to *February* 18, in ♈	43
1744	*March* 4, *France* declared War againſt *England*: and *March* 31, *England* declared War againſt *France*.	42
1745	*Cape Breton* taken from the *French*, *June* 16.	41
1746	The *Scotch* Rebels defeated by the Duke of *Cumberland*, at *Culloden*, near *Inverneſs*, *April* 16.	40
1748	A General Peace ſigned *October* 7.	38
1749	*Cape Breton* reſtored to the *French*.	37
1750	The *Britiſh* Fiſhery eſtabliſhed.	36
1751	The Prince of *Wales* died *March* 20.	35
1752	The Date and Calendar altered.	34
1755	*Liſbon* deſtroyed by an Earthquake, *Nov.* 1.	31
1756	*England* declared War againſt *France*, *May* 18.	30
1756	The Iſland *Minorca* taken by the *French*, *June* 27.	30
1757	Count *Brown* defeated by the King of *Pruſſia* near *Prague*, *May* 6.	29
1757	The King of *Pruſſia* defeated by Count *Daun* at *Collin*, *June* 18.	29
1758	The *French* defeat. at *Crevelt* by P. *Ferdinand*, *June* 23	28
1758	Lord *Howe* ſlain, *July* 6, and Gen. *Abercrombie* repulſed at *Ticonderoga*, *July* 8.	28
1758	*Cape Breton* taken by the *Engliſh*, *July* 26.	28

A.D.		Years ſince.
1758	The *Ruſſians* defeated at *Zorndorff* by the King of *Pruſſia, Sept.* 25.	28
1759	The Iſland of *Guadalupe* taken by Gen. *Barrington* and Commodore *Moore, May* 1.	27
1759	The *French* defeat. at *Minden* by P. *Ferdinand, Aug.* 1.	27
1759	The King of *Pruſſia* defeated at *Cunnerſdorff* by the Count *de Soltikoff, Auguſt* 12.	27
1759	Gen. *Wolfe* ſlain, though victorious, *Sept.* 13, and *Quebec* taken *Sept.* 18, by Gen. *Townſhend.*	27
1760	*Montreal* taken by Gen. *Amherſt, Sept.* 8.	26
1760	K. *Geo.* II. died *Oct.* 25, and *Geo* III. ſucceeded.	26
1761	*Pondicherry* taken by Col. *Coote, Jan.* 15.	25
1761	K. *George* III. married Q. *Charlotte, Sept.* 8.	25
1761	K. *George* III. crowned, *Sept.* 22.	25
1762	The Iſland of *Martinico* taken by Gen. *Monckton* and Adm. *Rodney, Feb.* 14.	24
1762	*George* Prince of *Wales* born, *Auguſt* 12.	24
1762	The *Havannah* taken by Lord *Albemarle* and Sir *George Pocock, Auguſt* 12.	24
1763	A general Peace in all *Europe.*	23
1763	Pr. *Frederick,* Biſhop of *Oſnaburgh,* born *Aug.* 16.	23
1765	Prince *William-Henry* born *Auguſt* 21.	21
1766	Princeſs *Charlotte-Auguſta-Matilda* born *Sept.* 29.	20
1767	Prince *Edward* born *Nov.* 2.	19
1768	Princeſs *Auguſta-Sophia* born *Nov.* 8.	18
1770	Princeſs *Elizabeth* born *May* 22.	16
1771	Prince *Erneſt-Auguſtus* born *June* 5.	15
1772	*Swedes* reſign their Liberties to the King.	14
1773	Prince *Auguſtus-Frederick* born *Jan.* 27.	13
1773	The Light Gold recoined.	13
1774	Prince *Adolphus Frederick* born *Feb.* 24.	12
1775	War commenced againſt the *North-Americans.*	11
1776	Princeſs *Mary* born *April* 25.	10
1776	The *Americans* declare themſelves independent.	10
1777	Princeſs *Sophia* born *Nov.* 3.	9
1778	The *French* ſign a Treaty with the *Americans.*	8
1778	War begun againſt the *French.*	8
1779	Prince *Octavius* born *Feb.* 23.	7
1779	War commenced againſt the *Spaniards.*	7
1780	War againſt the *Dutch* begun.	6
1783	A general Peace.	3

Equation of Time to the neareſt Minute.

Day	Jan ſub	Feb ſub	Mar ſub	Apr ſub	May add	June add	July ſub	Aug ſub	Sept add	Oct add	Nov add	Dec add	Day
	min	m	m	m	m	m	m	m	m	m	m	m	
1	4	14	13	4	3	3	3	6	0	11	16	10	1
2	5	14	12	3	3	2	4	6	1	11	16	10	2
3	5	14	12	3	3	2	4	6	1	11	16	10	3
4	5	14	12	3	4	2	4	6	1	12	16	9	4
5	6	14	12	3	4	2	4	6	2	12	16	9	5
6	6	15	11	2	4	2	4	5	2	12	16	8	6
7	7	15	11	2	4	2	4	5	2	12	16	8	7
8	7	15	11	2	4	1	5	5	3	12	16	7	8
9	8	15	11	1	4	1	5	5	3	13	16	7	9
10	8	15	10	1	4	1	5	5	3	13	16	6	10
11	9	15	10	1	4	1	5	5	4	13	16	6	11
12	9	15	10	1	4	1	5	5	4	14	16	5	12
13	9	15	10	0	4	0	5	4	4	14	15	5	13
14	10	15	9	0	4	0	5	4	5	14	15	5	14
15	10	15	9	add	4	0	6	4	5	14	15	4	15
16	10	14	9	0	4	ſub	6	4	6	14	15	4	16
17	11	14	8	1	4	1	6	4	6	15	15	3	17
18	11	14	8	1	4	1	6	3	6	15	14	3	18
19	11	14	8	1	4	1	6	3	7	15	14	2	19
20	12	14	7	1	4	1	6	3	7	15	14	2	20
21	12	14	7	2	4	1	6	3	7	15	14	1	21
22	12	14	7	2	4	2	6	2	8	15	13	1	22
23	12	14	7	2	4	2	6	2	8	16	13	0	23
24	13	14	6	2	4	2	6	2	8	16	13	ſub	24
25	13	13	6	2	3	2	6	2	9	16	12	1	25
26	13	13	6	2	3	2	6	1	9	16	12	1	26
27	13	13	5	3	3	3	6	1	9	16	12	2	27
28	13	13	5	3	3	3	6	0	10	16	11	2	28
29	14		5	3	3	3	6	1	10	16	11	3	29
30	14		4	3	3	3	6	0	10	16	11	3	30
31	14		4		3		6	add		16		4	31

If the equal or clock time be given, add or ſubtract the tabular numbers to or from it, as directed in the table; the ſum or difference will be the apparent or ſolar time. But do the contrary to reduce the apparent to equal time.

Eclipſes of Jupiter's Firſt Satellite.

January	*February*	*March*	*April*
Emerſions	Emerſions	Emerſions	
1 13 47 50	2 10 19 51	2 18 5 2	
3 8 16 0	4 4 48 39	4 12 34 22	
5 2 44 12	5 23 17 30	6 7 3 43	
6 21 12 24	7 17 46 26	8 1 33 4	The Eclipſes of *Jupiter*'s Satellites will not be viſible this Month, *Jupiter* being too near the Sun.
8 15 40 40	9 12 15 20	9 20 2 27	
10 10 8 57	11 6 44 19	11 14 31 49	
12 4 37 17	13 1 13 18	13 9 1 12	
13 23 5 35	14 19 42 21	15 3 30 36	
15 17 34 1	16 14 11 26		
17 12 2 24	18 8 40 36		
19 6 30 51	20 3 9 41		
21 0 59 20	21 21 38 51		
22 19 27 54	23 16 8 2		
24 13 56 25	25 10 37 18		
26 8 25 2	27 5 6 31		
28 2 53 39	28 23 35 49		
29 21 22 21			
31 15 51 3			

May	*June*	*July*	*Auguſt*
	Immerſions	Immerſions	Immerſions
	2 17 7 15	1 0 38 21	1 21 8 11
	4 11 35 32	2 19 6 31	3 15 36 45
	6 6 3 49	4 13 34 42	5 10 5 21
	8 0 32 4	6 8 2 55	7 4 34 0
	9 19 0 19	8 2 31 9	8 23 2 39
The Eclipſes of *Jupiter*'s Satellites will not be viſible this Month, *Jupiter* being too near the Sun.	11 13 28 33	9 20 59 23	10 17 31 18
	13 7 56 47	11 15 27 36	12 12 0 0
	15 2 24 58	13 9 55 50	14 6 28 45
	16 20 53 8	15 4 24 6	16 0 57 30
	18 15 21 17	16 22 52 24	17 19 26 17
	20 9 49 25	18 17 20 43	19 13 55 6
	22 4 17 33	20 11 49 4	21 8 23 55
	23 22 45 41	22 6 17 27	23 2 52 47
	25 17 13 50	24 0 45 51	24 21 21 41
	27 11 42 0	25 19 14 16	26 15 50 35
	29 6 10 11	27 13 42 42	28 10 19 30
		29 8 11 10	30 4 48 26
		31 2 39 39	31 23 17 24

September	*October*	*November*	*December*
Immerſions	Immerſions	Immerſions	Emerſions
2 17 46 22	1 1 30 44	1 22 9 47	2 2 18 20
4 12 15 20	2 19 59 46	3 16 38 19	3 20 46 23
6 6 44 20	4 14 28 44	5 11 6 54	5 15 14 24
8 1 13 22	6 8 57 43	7 5 35 23	7 9 42 24
9 19 42 24	8 3 26 41	Emerſions	9 4 10 24
11 14 11 25	9 21 55 40	9 2 11 27	10 22 38 22
13 8 40 29	11 16 24 35	10 20 39 52	12 17 6 19
15 3 9 31	13 10 53 29	12 15 8 17	14 11 34 15
16 21 38 34	15 5 22 24	14 9 36 37	16 6 2 11
18 16 7 36	16 23 51 16	16 4 4 57	18 0 30 7
20 10 36 39	18 18 20 5	17 22 33 14	19 18 58 4
22 5 5 41	20 12 48 56	19 17 1 29	21 13 26 2
23 23 34 42	22 7 17 39	21 11 29 43	23 7 54 0
25 18 3 43	24 1 46 27	23 5 57 53	25 2 21 58
27 12 32 44	25 20 15 9	25 0 26 3	26 20 49 56
29 7 1 44	27 14 43 54	26 18 54 9	28 15 17 54
	29 9 12 33	28 13 22 16	30 9 45 53
	31 3 41 9	30 7 50 22	

To illuſtrate the Uſe of the preceding Table by an Example.

Suppoſe on the 16th Day of November this Year, the Time of the Emerſion of Jupiter's firſt Satellite be obſerved (by a Teleſcope) in an unknown Meridian, to happen at 5 h. 53 min. 17 ſec. at Night; I find by the Table, that the Time of this Emerſion will happen at the Britiſh Obſervatory at 4 h. 4 min. 57 ſec. the ſame Day: The Difference of the Times is 1 h. 48 min. 20 ſec. which being converted into Degrees and Minutes of the Equator, at the Rate of 15 Degrees per Hour, will make 27 deg. 5 min. the Longitude of the Place of Obſervation to the Eaſt; becauſe the Time is more than that at the Britiſh Obſervatory.

Operation.		
	Emerſion obſerved — —	$5^h\ 53^m\ 17^s$
	Emerſion at *Greenwich* —	4 4 57
	The Difference of Time —	1 48 20
	Anſwering to — —	27° 5′ 0″

Of the Eclipſes this preſent Year, 1786.

While the Sun is meaſuring out into Seaſons, Months, and Days, the preſent circling Year, the two grand Luminaries will be five times eclipſed; but none of them will be viſible to the Inhabitants of our Britiſh Iſle.

They will happen as follows:

The firſt, is an inviſible Eclipſe of the Moon, on January 14th, beginning about half an Hour paſt 11 in the Morning; the Middle at 44 min. paſt 12; and ends at 55 min. paſt One in the Afternoon. Dig. eclip. 4° 47′ on ☽'s South Limb.

The ſecond, will be an inviſible Eclipſe of the Sun, on the 30th of January, at 38 min. paſt 2 in the Morning. He will, on the Meridian in 134 deg. Eaſt Long. and 32 deg. North Latitude, be centrally eclipſed at 3 o'Clock the ſame Morning.

The third, though to us inviſible, is a total Eclipſe of the Moon, as follows:

Beginning July 11th,	8 h. 56 min. Morn.
Beginning of total Darkneſs,	10 h. 21 min.
Middle of the Eclipſe,	10 h 40 min.
End of total Darkneſs,	11 h. 0 m.
End of the Eclipſe,	12 h. 24 min.

The fourth, is an Eclipſe of the Sun, on the 25th of July, at 11 min. paſt 9 in the Morning; and although inviſible to us, he will, in 42 deg. Eaſt Long. and 43 deg. of South Latitude, be centrally eclipſed.

The fifth and laſt, is an inviſible Eclipſe of the Sun, on Wedneſday Dec. 20, at 49 min. paſt 4 in the Afternoon.

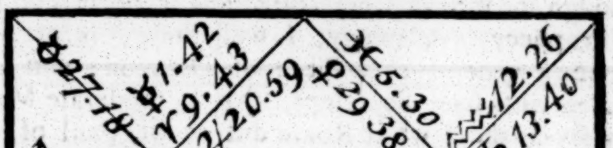
For Aſtrological Judgments upon this Subject, the Reader is referred to what I laſt Year advanced upon this Head.

I however cannot forbear tranſmitting to the Curious, a Calculation of a Tranſit over the Sun, performed by the nimble Mercury on May 3d, A. D. 1786.

Mercury's Tranſit over the Sun's Diſk.

Ingreſs	2 h.	15 min.	mane.	☿ Lat. N.	13′ 27″
Ecliptic ☌	4	25	—	—	11 54
Middle	4	57	—	—	11 31
Egreſs	7	38½	—	—	9 35
Center's neareſt Approach			———		11 43

I ſhall next, according to ancient Cuſtom, give ſome Aſtrological Judgments, though very ſparingly, from a Scheme of the Heavens, and the Poſition of the Planets, as they will appear on the Ingreſs of Sol into the Vernal Equinox on the 20th Day of March, 1 hour and 31 min. before Noon



From the above Scheme, as well as from the various Aſpects of the preſent Year, many of which are of a malignant Nature; and which would, if not prevented by others of benign Influence, prove fatal; if the Rules of Aſtrology, and the Wiſdom of ancient Days might in theſe our modern Times be depended on, I apprehend that this will be a Year of much Hurry and Confuſion. I will not threaten abſolute War and Bloodſhed, yet methinks,

thinks, certain I am that this is not the Year in which they ſhall beat their Swords into Ploughſhares, and their Spears into pruning Hooks; I however humbly conceive, that although the Year will be a buſy one, yet more in Contrivance than in Action: Loſſes by Fire and Water are the ſure Attendants upon every Year, we need not therefore expect this to be exempted. The Rich and the Poor lie down together in the Duſt; and if he who is the Maker of them all ſhould call ſome, perhaps unexpected, from high Stations in this Life, to give an Account of their Stewardſhip, I have calculated the Nativities of none of theſe, and therefore cannot ſay who, or in what Department, whether in Church or State; I think I may ſay, though probably in both; and for another Reaſon, which I keep to myſelf, if I could, I would not. I hope however, for the Benefit of the induſtrious Countryman and labouring Mechanic, upon the whole a good Harveſt. Many other Preſages might here be given, but here is enough for ſhrewd Conjecture, and I boaſt not the true Spirit of Prophecy. Aſtrology, I well know, is at this Day looked upon in general as a Piece of Deluſion; and its Profeſſors treated with ſuch Contempt, that a moderate Man may reaſonably ſay as the Jews at Rome did to St. Paul of old, as concerning this Sect, we know that every where it is ſpoken againſt; but that is no Teſt of its Falſity, ſeeing there is no Truth but what has been controverted. Certainly the Art is of high Antiquity, and has been the Study and Admiration of learned Men in all Ages; this certainly ſpeaks in its Behalf. We are at this Day evidently convinced of the Verity of the Doctrine of the Antipodes; yet many great Men in their day have formerly oppoſed it, and deemed it a mere Fable. Lactantius, for Inſtance, was of opinion, that the Earth was not a globular Body, but a wide extended Plane; and therefore could admit of no ſuch Hypotheſis. St. Auſtin, on the other hand, admitted that the Earth was ſpherical; yet never could entertain the leaſt Idea that there were People in the World whoſe Feet were oppoſite to each other. Several other Opinions, which are now eſtabliſhed upon the firm Baſis of Geometry and Demonſtration, have been long combated. One in particular, as moſt relative to my Profeſſion, I ſhall in the ſcanty Room here allotted, endeavour to enlarge upon, which is the Copernican Syſtem. But before I begin upon this, I beg to conclude in as modeſt a Manner as I poſſibly can the preſent Subject I am upon, *viz.* Aſtrology.

Let

Let no one deſpiſe the Art, becauſe of the Bungling or Baſeneſs of many of the pretended Artiſts. What Man of Senſe would deſpiſe a Guinea, merely becauſe it had gone through the Hands of a Fool or a Rogue? Again, I fear many who profeſs the Art, are enliſted beforehand into ſome Party; and whatever the Stars predict, whether Weal or Woe, the Bleſſing is to fall upon themſelves, and the Curſe upon the Party oppoſite. Now this, I muſt own, is baſe underhand dealing; yet it does not appear to me, that Aſtrology ought to ſuffer in the Eyes of thinking People for this. In the grand Article of Religion, how many of the Preachers of the Word of everlaſting Truth are trained up to ſome particular Claſs, and taught to explain the Scriptures according to the ſeveral Modes in which they were educated; yet what Man of Senſe would throw away the ſacred Volume of Holy Writ, merely becauſe the Opponents in Polemical Theology varied in their Sentiments? I believe this, and I think every ſenſible Man will join me, *viz.* that neither the Scriptures nor the Stars, are either Papiſts, Lutherans, or Calviniſts. The Inference to be drawn from hence is, that neither Religion nor Aſtrology ought to ſuffer from the Ignorance or Impertinence of their Profeſſors. To conclude upon this now deſpiſed Subject, I will ſay with the great Jewiſh Gamaliel, Doctor of Law, and had in Reputation of all the People:

And now, I ſay unto you, refrain from theſe Men, and let them alone; for if this Counſel, or this Work be of Men, it will fall to nought.

But if it be of God, ye cannot overthrow it; leſt haply ye be found even to fight againſt God.

Next, in relation to the Copernican Syſtem; take the Objections that have been made by its various Oppoſers, and let us ſee what Difficulties even Truth itſelf had to ſtruggle with, before it could make its Way into the World. The firſt Argument is this:

We ſee the Sun, the Moon, and the Stars, ariſe in the Eaſt; make a Progreſs through the South; and, at laſt, ſet in the Weſt. Now, are our Eyes given us merely to deceive us? may we truſt our Senſes, ſay the Ptolemaicks? or muſt all vaniſh like Shadows of the Evening, to make way for the Dawn of your new-conceited Syſtem? Again,—the Heavens appear on each Quarter, exactly equidiſtant from us; and conſequently the Earth muſt be in the very Center. Reaſon will tell any Man that.

Becauſe

Becauſe were we in any other Place, we ſhould perceive on Part of Heaven nearer than another; conſequently the Star would appear greater in that Part of Heaven which is neareſt us, and leſſer in that Part which is furtheſt off; and for this th Appeal is to plain Senſe. A further Argument is, that according to this abſurd Syſtem of the Earth's turning round, we ſhould once each Day have our Feet turned upwards, and ou Heads hanging down in the Air; our Houſes would tumble over, and every looſe Thing, as Stones, Animals, *&c.* having nothing to reſt its Weight upon, drop into the Regions of immenſe Space. Beſide, admitting the Motion of the Earth in 24 Hours round its Axis, it is plain that allowing the Circumference of the Earth to be 21,600 Miles, it muſt of conſequence happen, that if a Stone falls from a Turret ſo high that it takes twelve Seconds of Time in falling, it will fall three Miles from the Place whence it was dropt. Again, ſhould a Pigeon fly three Miles Weſtward from a Dove-houſe in one Quarter of an Hour, the Dove-houſe, by the Earth's Motion, would in that Time have proceeded 225 Miles towards the Eaſt, and conſequently the Dove would be 228 Miles from its Lodging, which both Reaſon and Experience contradict. And leſt theſe Arguments ſhould prove inſufficient, next comes Error in the Garb of Divinity, and horribly, I aſſure you, does ſhe pelt poor Copernicus with Scripture Texts. For inſtance, Sun ſtand thou ſtill upon Gibeon; and thou Moon, in the Valley of Ajalon, ſaid Joſhua; ſo the Sun ſtood ſtill in the midſt of Heaven, and haſted not to go down about a whole Day. Moreover, if Joſhua is not to be credited, hear what David ſays, he laid the Foundations of the Earth that it never ſhould move at any time; and again, with relation to the Sun, he cometh forth as a Bridegroom out of his Chamber, and rejoiceth as a mighty Man to run his Race. And again, the Sun riſeth, and the Sun goeth down, and draweth to the Place where he riſeth, *&c. &c.* Thus pleadeth Plaintiff Ptolemy, and Defendant Copernicus ſhall be heard in our next.

Of the FIXED STARS.

(CONTINUATION from LAST YEAR.)

To what we have already ſaid of the fixed Stars, it will not be amiſs to add ſomething touching thoſe which, becauſe they are now and then viſible, and at other Times diſappear, are called New Stars; as that in Caſſiopea, obſerved by Tycho; and three others in the ſame Conſtellation, lately diſcovered by Signior Caſſini; that in Serpentarius, by Kepler and others; two more in the Beginning of the Conſtellation Eridanus, detected by Caſſini; that in the Neck of the Whale, and in the Northern Part of Andromeda's Girdle, by Bullialdus; that in the Swan's Breaſt, and another near its Beak, by Hevelius and Don Anthelm, a Carthuſian of Dijon; and four others near the Arctic Pole, lately taken notice of Caſſini. The Nature, Subſtance, and Generation of which Stars, are diverſly diſcourſed of both by Philoſophers and Aſtronomers. Some conceiving them to be generated of ſublunary Matter, and to be Comets wanting their Bruſh or Tail; others conceiving them to be generated of celeſtial Matter by Condenſation, as the others of the fixed Stars at the firſt Creation; but not ſo compact and ſolid as thoſe other fixed Stars are, and therefore by degrees come to loſe their Conſiſtence; and with the Diſſipation of their Matter, their Light. Some imagine them to be of the ſame Nature, Subſtance, and of equal Continuance with the other fixed Stars; but ſſign to them a different Motion, by which Motion of theirs hey are ſuppoſed ſometimes to approach nearer to, ſometimes ecede farther from the Earth, by means of their firſt Motion becoming viſible, and ſolving the different Appearances of their Light and Magnitude; by the latter, ſhewing the Reaſon of their Diſappearance. But this Motion is denied by others; but becauſe they find even in the fixed Stars themſelves, the like Alteration of their Lights and Magnitudes, which ſometimes ppear ſo ſmall, as if they were Stars of the laſt Degree, at other times ſo bright, as if they were of the firſt Degree, they llow of ſome Alteration to be made in the very Bodies of theſe Stars; and as the Sun appears ſometimes overcaſt with Spots, ſo hey conceive theſe Stars to be ſometimes overclouded with uch kind of Spots, when they diſappear; at other times, to ecover their Light, and become viſible. Others are of opinion, that

that the Globes of this Kind of Stars, are ſo made, that only o Side of them ſhines; the other being quite obſcure, (the fir Author of which Opinion ſeems to be Ricciolus, as he affirms himſelf, Almageſt. Nov. Tom. 2. l. 8. c. 17.) and that the move and have a Circumrotation about their own Axes, (like the Sun has been diſcovered to revolve, by means of the Spo which ſometimes appear on his Face,) now turning their brig Sides to us, at other times their Dark. And for this Reaſo they are, by Le Pere Cherubin, called Stellæ Verſatiles. Th Periods of their ſeveral Motions not being yet clearly dete mined, except that of Algol, in Meduſa's Head, whoſe Perio has been lately obſerved by ſeveral Perſons; but firſt and chieſ by John Goodricke, Eſq; of York, in the Years 1782 and 178 the mean Period of its Variation being ſettled at 2 days 20 hou and 49 minutes; this Star appearing of the ſecond Magnitu when brighteſt, but only of the 4th Order of Magnitude whe fainteſt; which Change is finiſhed in the Space of about ſeve Hours, employing three Hours and a half in decreaſing to i ſmalleſt Size; and in other three Hours and a half gradually r covering itſelf again to its uſual Splendor of a Star of the 2 Order of Magnitude. The other Periods are not ſo well know but from the beſt Obſervations, are nearly as follows, *viz.* Th in the Neck of the Whale, making its Variation in about elev Months; that in the Breaſt of the Swan ſuppoſed to be not le than about 14 Years; and that near the Beak of the Swan, abo 10 Months. The Periods of the others being ſtill leſs known.

Of the SUN.

Having diſpatched what ſeemed requiſite to be added, co cerning the fixed Stars; ſomething is next to be ſaid of tho which are termed erratic, or wandering Stars or Planets; an among them, if we may ſo place him, (who is really one of t fixed Stars,) of the moſt glorious Luminary, the Sun.

Now his Nature or Subſtance, with Anaxagoras, Democrit Metrodorus, Epicurus, Pythagoras, and Plato of old; and wi Kepler, Scheinerus, Rheita, Bullialdus, Kircher, Ricciolus, a others of late, we cannot with fairer Probability conjecture to other than a formal fiery Body, conſiſting of true and prop elementary Fire, partly liquid, partly ſolid. The Liquid bei an Ocean of Light, and moving with fiery Billows, and flami Ebullitions, as is manifeſt to thoſe who look upon him throu a Teleſcope; but the ſolid Parts, like the Land in our ter

queo

queous Globe, divided into Continents, Iſlands, Mountains, Rocks, that thereby the vehement Motion of the exeſtuating ſolar Ocean might be reſtrained; and, by frequent Alliſions, repulſed, diſſipated, and broken, to the End it might more efficaciouſly communicate its pauſpermatic Virtue to all thoſe Bodies, to which it is to afford Light and Influence. We may likewiſe probably conceive that the ſolar Globe is, as this Earth of ours, hollowed into vaſt internal Caverns and Receptacles of Fire, which break forth out of the ſolar ignivomous Mountains, in the ſame manner as we find our ſubterranean Fires to break out of Etna, Hecla, and Veſuvius. And it is in all Appearance as probable, that the ſolid Parts of the Sun, within which the fluid and liquid Fire is contained, like Metal in a Furnace, are thoroughly ignited, in the ſame manner as we find the Bricks in the Roofs and Sides of Furnaces are made red hot, and look of the ſame Colour as the fiery Maſs of melted Matter within them. We may farther probably infer, that the earthly or ſolid Parts of the Sun, are of an aſbeſtinous and incombuſtible Nature, and far better able to reſiſt the Voracity of the Fire, than this Earth of ours. And though it ſhould be ſuppoſed that ſome Parts here and there ſhould be conſumed, and perhaps whole Mountains be levelled and waſted; yet it follows not, that the Globe of the Sun ſhould therefore be totally deſtroyed, more than this Earth of ours is, by the frequent Accidents of ſuch kind of partial Ruins and Decays. It is alſo evident, that the Splendor as well of the fluid as the ſolid Fire of the ſolar Globe, is far more bright than our earthly Fire or Flame; the End for which it was made, neceſſarily requiring the ſame, as being intended for the Fountain of Light; and the Lamp, if not of the whole World, at leaſt of the whole Planetary Syſtem.

This Fire, as well the liquid or ſolar Sea, as that which breaks out of the Caverns and Mountains, exhales conſtantly fuliginous Vapours; not black and ſooty, like our Fire, but bright and pure; which, collected together, and condenſed in the circumambient Ether, do in a manner overcaſt the Sun, as Clouds overſhadow the Earth.

From what has been ſaid, and the Evidence of frequent Obſervations lately made by the Help of the Teleſcope, it is manifeſt, that the Sun is not, as Ariſtotle and his Followers fancy it to be, of an unalterable Subſtance, but ſubject to divers Changes and Alterations; as not only the Generation and Production, but the Corruption and Diſſolution of ſeveral ſtrange Phænomena in the Body thereof, altogether unknown to the Ancients, clearly demonſtrate. Among which the moſt eminent are thoſe by later Aſtronomers termed the

Maculæ & Faculæ Solares.

The

The Maculæ, or Spots, are certain cloudy Obſcurities, appea ing on the Diſk of the Sun; ſuppoſed by ſome Aſtronomers be a fuliginous, obſcure Matter or Vapour, ſometimes cloſe compacted into one, ſometimes diſperſed and diſſipated into ſ veral Parcels, iſſuing from his fervent fiery Body, by Force the extreme Heat; and though it cannot be certainly dete mined, by reaſon of the want of Parallax, whether they be i the Sun himſelf, or out of and diſtant from his Surface, yet one conſider their firſt Appearance or Birth, their Decay and Di appearance, their Shape or Figure, Increaſe, Diminution, Sep ration, Conjunction, Motion, and other like Accidents, it wi be credible, and by what Obſervation makes out moſt probabl that they are in the very Body of the Sun, at leaſt not far fro the Superficies thereof; in regard that when they are obſerve near the Border or Edge of the Sun's Diſk, going off from h viſible Hemiſphere, and turning about to the other; at whic time they begin to diſappear, they cannot be perceived to raiſed above the Surface of the Sun, or to ſhew any appare Space or Diſtance between them and the Edge of the Sun Globe; as in Reaſon they would, and as indeed they ought appear if it were really ſo.

Their Shapes and Figures are of unequal Form and Grandeu and moſtly irregular; which argues them not to be Stars or Pl nets moving about the Body of the Sun, as Tarde and Malape tius have ſuppoſed; the one calling them 'Sidera Borboni the other 'Sidera Auſtriaca.' Some of theſe are more durab and laſting than others; and thoſe are conceived to be the fo Parts of the Sun; ſhewing themſelves variouſly figured, and different Magnitudes, by Reaſon of the vertiginous Motion the Sun about his own Axis, repreſenting them to our Sig diverſely ſituated; which Diverſity of their Appearance ari likewiſe from the Manner of the Sun's Circumgyration, whi is ſuch, that his Axis does not always keep the ſame Inclinati to the Plane of the Ecliptic.

FINIS.